

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 592:

	TTGTTATAGT GTCTGAATCT GTGTAACCTCT TGCCCATGTG TTCTGAGTAA AGCACCCACT	60
5	GTTTATTTAC TTTTCGTGT AGTCTAGCTT CGTGTAGTAG TTTGTTTAAAC TTTTGTGCTG	120
	ATATACCGTA GTCTGCCGCG ATTTGAGTTG TGGCTAATGT GCCAGTTGAT TTTAAGATTT	180
	CATCAACATA ATCTGCTTTG GGTTTTAGCT CTCCAATTTT TTGTTGTAAA AGTAAGTTTT	240
10	GCTCTTTTTT TTTCTTATAC TCAGTCAACA CTGTAATGAT GTAGTCTGGA TCTTTTAATG	300
	TTTGTTCAAT TACATTGTCT GTTGCGTATA TACCGTGTTT GCGAATAGCT GGTaGGACAT	360
	CTGATGTTAC CCAGCGTTTG AATTTTCTAG CGGTTTCTCT AATTTTTTTCG TTTTGTCTTT	420
15	GTTTAGAAGC ATCGAAGATT AGACTGTATA ATCCTGATTC GTTGATAATG ATCATATTTT	480
	TGTTTTGACC TGATGCACTA AATTGGTGCG TCAGTTTGTC CTCGCTATCA ACATGATTTT	540
20	TAATGGCATT GTCTGATCTT GCATATCCTA AAATCTCAGC AATATCTTTT CCTACAAAAT	600
	AAGGTTTCGT TTCAATTTCT ACTGTTCTTA CTGGTAGCTC TTTAAAATTA AATGTTTGTA	660
	ATGCTTGCAAT TTGAGTATCC TCCTTTTTTCC TCAACACCCA CATTGAGCAG ACGGTTATCG	720
25	CAATGACTAT CGAATGTATT TAAACGCGGC TCATATCATC GCCAGcTCTC GCTCACATCT	780
	GCTCAATGTG GATGTTGATA AGCGTGGTTA TATTAAGAAG TGAATGTTAC TGATTCACTT	840
	TCCGCCACTC TGTTAAATCA GTAACCTTGT TATCGCTTTC AACACCGTTA AGCTTGCTTA	900
30	ACGCTTTTAC TACTTTTTGG AACTCTTTGA TAGCACTtCG TAGCTTTTTTA GTAATTTTAT	960
	CTTCTACCAT TTCCAAACCA GCAAATGCGT CTTGCTTATT CATGCTTAGA TGTTTGTTGA	1020
	AAAGATCTCG AGTGTATCTT ATTTCTTTAA GTGATTTATC ATAAGCTTCA ATTTGTCTCTG	1080
35	AAAGGTTATG ATATTTTAGT TGTAAGTTTAA CTAATTTTAA TGATTGGTCT TGCATTTGTT	1140
	ATGTCTCCTT TAAGATGTTT GTTTGCGTTT CGTGTACTTT GTGGGTAAAA AAATATCTCC	1200
40	AATATTTTCG TCAAAAAAAT CAGCGATAAT AAACATCTCA TCATTCTTAA ATTGATGCTT	1260
	TCCTAATTCT TTTAAACGAT AACCTTCAGT TGATATATTC AAGAGGTTTG CTAAATCTTC	1320
	TTGAGTACAC TTTCTTTCTT TTCTCAACTT TATTAAATTC CATTGCATGT TGTCACCTCC	1380
45	CGCTTTACAA AACCTACTAT ACACGATACG GTACTTGnGT CAACATAAAA GTTTGCTTTT	1440
	CGTGTATTT	1449

(2) INFORMATION FOR SEQ ID NO: 593:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1170 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 593:

5 ACCAAAAACA CTTTCTAAAG AAATTGTTTC AGAACCATTT GCTAAAAACC AATTACGTGA 60
 AAAAGCTCGT CTAAC TAACA TTAAAGGTTT AGAGATTCCA AGAGTTTCAT AACTTTAGA 120
 CGATGATGAT TTCATTACAG ACGTAGAAAC AGCAAAAGAA TTAAAAGCAA AAGGTGATAC 180
 10 AGTCAAGTTC ACTACTAATA AATTCAAAGT ATTTGCTGCA ATTTAGATA CTGTAATTCA 240
 TGGATCAGAT GTAGATTTAG TAACTGGGT TGAAAACGCA CTACAATCAG GATTAGCAGC 300
 TAAAGAGCGT AAAGATGCCT TAGCAGTAAG TCCTAAATCT GGATTAGAAC ACATGTCATT 360
 15 TTATAATGGA TCTGTAAAG AAGTTGArGG AGCAGACATG TATGATGCTA TTATTAACGC 420
 TTTAGCAGAT TTACATGAAG ATTATCGTGA TAACGCAACA ATTTATATGC GATATGCAGA 480
 20 TTATGTCAAA ATTATTAGTG TTCTTTCAAA TGGAACAACA AATTTCTTTG ACACACCAGC 540
 AGAAAAAGTA TTTGGCAAAC CAGTAGTATT TACAGATGCA GCAGTTAAAC CTATTGTGGG 600
 AGATTTCAAT TATTTTGGAA TTAATATGA TGGAACAAC TATGACACTG ATAAAGATGT 660
 25 TAAAAAAGGC GAATATTTGT TTGTATTAAC AGCATGGTAT GATCAGCAAC GTACATTAGA 720
 CAGTGCATTC AGAATTGCAA AAGCAAAAGA AAATACAGGt CCATTACCCA GCTAAGCCCC 780
 AAAAGGTTAA TGTAACAGCT AAGGCTAAAT CAGCTGTAAT ATCAGCCGAA TAGGGGTGAT 840
 30 GAAATGAGTT TAGAAGAAk TAAATTGTGG TTGAGAATTG ACTATAATTT CGAAAATGAT 900
 TTAATTGAAG GTCTCATTCA ATCGGCTAAG TCTGAATTAC TATTAAGTGG GGTnCCAGAT 960
 TATGACAAAG ATGACTTGGA ATACCCGCTT TTTTGTACAG CGATTAAATA TATCATTGCA 1020
 35 AGAGATTATG AAAGTCGTGG ATACTCAAAT GACCAATCTA GAAGCAAGGT GTTTAATGAA 1080
 AAAGGATTGC AAAAAATGAn TTTGAAATTA AAAAAGTGGT AGGTGATTTT TAAATGGAAT 1140
 40 TTAATGAATT TAAAGATCGC GCGTATnTTT 1170

(2) INFORMATION FOR SEQ ID NO: 594:

(i) SEQUENCE CHARACTERISTICS:

- 45 (A) LENGTH: 1393 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 594:

TGAAGGGTGT TTTGTTTATG GCCAATTGCT GTGTTATTAA AnCGAATGTT TCGAATGGAA 60

	ATCATTCCGG AAGAGGACAT GTCTTCAGCT TCTGATTGTA AAGCACAGTT TTATCGCGGT	180
	ACTTTGCAGC GCTTTTACCA AtCnTTGCAC GCAGAAAAGC TTACACCTTA TGTTATGTCT	240
5	TATGACGATA TCATTTTCATT TTGTAAAGAA AACAAATATCT CTGAAGTAGT GACTGCGGGT	300
	GATATTATGA GTTATCATCT TGAAGAATAT GATATTTTAC ATCAACGTTC TTTATTCAAT	360
	GAAGCACGCA TTGCCGTTAC TTTGATACGT GGGAAATCATT ACTTTAAAGC GAGTAAACA	420
10	ATGAATCAAC AAGGGGAGCC ATACAATGTT TTTACTAGTT TCTATAAAAA ATGGCGACCT	480
	TACTTGAGGC ATAGAGACGT ATATCACTAT GATTTAAAAT CATTGAAAA CTTTGTTCATT	540
15	GCATCACCTG ATGATTTAGT GTTTGATGAC ATAGCATTG GATCCTCACA aATAATTGAA	600
	CAGatAAATG GCAACATTTT TTAGATCAAG ATATACAGAA TTACGAAAGC GGAAGAGACT	660
	ATTTACCTGA AGTATTAACA AGTCAGCTAA GTGTGCTTT AGCATATGGA TTATTAGATA	720
20	TTATTGAAAT TTTTAATGAT TTATTGGCGC GTTATGATGA AGATGAGGCA AACTATGAAG	780
	CATTTATACG TGAACTCATT TTTAGAGAAT TTTATTATGT GTTAATGACA CAGTATCCTG	840
	AAACCTCATA CCAAGCTTTC AAACCTAAAT ATCGACAGAT AAAATGGTCG CAAAATGAAG	900
25	CGGATTTTAA TGCATGGTGC GAAGGGCAAA CAGGATTTC AATCATTGAT GCAGCAATAA	960
	TGGAATTGAC ACAAACCTGGT TTTATGCATA ATCGAATGAG AATGGTTGTG TCGCAATTTT	1020
	TAACCAAAGA TTTATTTATA GATTGGACAT GGGGAGAAAA ATTCTTTAGA AAGCACCTTA	1080
30	TTGACTATGA TGCAGCATCA AATATTCATG GATGGCAATG GTCTGCTTCT ACAGGTACGG	1140
	ATGCAGTGCC GTATTTTAGA ATGTTTAATC CAATAAGACA GAGTGAACGC TTTGATGCTA	1200
	AAGCTTTGTA TATCAAAACA TATCTTCCGA TTTTAAATCA AATTGATGCA AAATATTTGC	1260
35	ATGATACACA ACGCAATGAG TCCAACCTTT TTGAACAGGG GATTGAATTA GGTAGTCATT	1320
	ATCCAAGACA AATGGTAGAT CATCAAGAAA AACGTACACA AGTTTTAGCT ACATTTAAAG	1380
40	CGCTAGACTA ATT	1393

(2) INFORMATION FOR SEQ ID NO: 595:

(i) SEQUENCE CHARACTERISTICS:

- | | |
|----|-----------------------------|
| 45 | (A) LENGTH: 1484 base pairs |
| | (B) TYPE: nucleic acid |
| | (C) STRANDEDNESS: double |
| | (D) TOPOLOGY: linear |

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 595:

55	TTAACTTGAA AGATTTCCCC GACATCTATA ACTTGTATAA TGTGTATATG TCGTTTTTAG	60
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	AAAAATTAAA AAAAGAATAT CTTGATTGGT ATAATCAGAC CTTAGAGTTT TCTAATTTAT	180
	CAAACAATGT AGTAAGwATA GATACTCCTT TTAAAGATAA TTCTTTAGAT AATTTAATAA	240
5	TTTACGCTTT ATACGATCAG TCCAGAGACA TGATTACACT GACAGATGAC GGCTATACTA	300
	TATtTGATTT AGAAAATAAT GGTATTTCTT TAAATAAATC AAAAAAACGT AAAAAGATTT	360
	TTGAAGAGCA CCTTTCAGCT TACGGTATTA AATATAACGA TAAAACTCAC GAAATTTTTG	420
10	TTCAAACATAA CTTTAAAAAT TTTAATAAAT CGAAACATAA TTTATTACAG TGCCTTATAT	480
	TTGTTAATGA TATGTACTTA CTTTcTAATC CTAAGTCACA GAACATATTT ACAGAAGATG	540
	TTGCAAACAA ATTGGATGAA CATAACATTT ATTACGGAAG AGATTTACCT ATTATAGGAA	600
15	GCAGTGGTGT TGTTcATAAT TTCGACTTTT TTATTAGCGC TAAGAAAAAT CAAAAAGAAA	660
	AATTTATCAA TGCTATTTCT AACCCTAATA ATTCTATGAT TATTAAGTCG AAAATAACGG	720
20	ATGCTATGCA AGCAAAAAAA ATAAAAAGAC ACAGGCAAAA TGAGTTTATT TTTATTTTAA	780
	ATGACTCAAA AAAAGAAATA AATGAACATA ATAAAAATCT TCTTCATGAA AACTATATTA	840
	GTACAATAGA TTATAGCGAA TTAGATGAAA AGATAGGTTT ATTGATTTAA TATATATAGA	900
25	CGTGATAATA TCAATGTTTA TATTAAATGA AACGAATTTG AAAATTTCTGA AACAGCTTAA	960
	GATAGCAAAT TGAATAGCCT TATTGATAAT GCAGAATCGT CTACACTTAG TTGAACAAAT	1020
	TCTATGAGAA TAGATATTGT TAAACTATTT GGGTAGGCGA TTTTATTTTG ACAAGAGTCA	1080
30	GAAGATTATT TAGTTCATAG TTTAAGTTAC AAATGGCTAA ACTTTATGAA AATGGTATGA	1140
	CTAGAATCGA AATTATACTC GAATACGATT TAACACTCTC AATCTTCTCG AACTGAATAA	1200
	ATACTGGGTC ATTCAATCAT CAAGACAAC TAATAAGTGA TGATAAATGT TCATACCATT	1260
35	TTGCAAATAT AACCAGATAC TCTCAACAAA ATGTAGAGTT CAAAATTAAA AATGTCCCTA	1320
	ATTGGCACAT TGCTGTATGA TAATAAATTC AACTTAGATT TCAACAATAT AACTAATGAT	1380
40	GCTTATATTT ACCGCGATAT CAAACCAAAC AGCCCATCCA CAAACAAATT AGAATATATC	1440
	mTGTTAATAA TAGTAAATGA TATATCTTCC AAAGACCGCA AACT	1484

(2) INFORMATION FOR SEQ ID NO: 596:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 1435 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 596:

	CTTTATCaTT AAATGCCaTT TTGaATCCTT CTTGAATTTG TTTGATTTCC TTTTCAGTAT	120
	TATTAACCTT GTTCAAGACA GTGCCATTAA TTTTCTTCTT GAGTGGACCA ACCTCATCTT	180
5	TATTAGTTGA TTCATGAATC GTTAATCCAA TGTGTGGCTG TATTCTATAA CCATCATTCG	240
	CTATAGTTGA AACATATTGT GaTAATTGTA ATGGTGTATA GGTATCATAT TGACCAATTG	300
	ATAAATCTAG ATAATTACCT GGATTATTTG TTAATGGTTC GATTTGACCT CTTGTTTCAT	360
10	TTGGTAAATC TATCCCTGTT TTCACACCTA AGCCTACTTG ATTTAATCCT CTTCTTAGCT	420
	TTTGGGCAGG TGAAC TTATG TCTGAAGGTA AAGCCATACC AGAATAATAA GGGTCTCCCG	480
	CTAATTTTAA TGCTGTTTTA AACATATATA CGTTTGATGA ATGCATCAAA GCTTGCTTAT	540
15	CATTAATAGT TACATGCCCG TTTTATTGA AGTATGATCG TTTTGTCAA CCACCTTGGA	600
	AATGTAATGG TTCATCGACC ATTGTTTCTC CAACTTTGAT AGCTTTATTC TGATAACCGG	660
20	CTAATAATGT TCCACCTTTT ACAGAAGATC CAACCGCAA TTGAGAAGTA AACGTACCAA	720
	TGTCATAATC AGTCATTTTA CCACTCTTAT TAATCTGCTT TCCGGCAAGC GCAAGAATGT	780
	CTCCATTTTT AGGATTTTGT ACAACCATCA TTGcATTATC CATATCTTTG GCACCTTGAC	840
25	TGCGAsTTCT TAATTTGTTT ATCTAATAAT GCTTCTACTT CTTTTTGAAG ATCTATATCG	900
	ATCGTTAATT TCAAATCTTG ACCGCGAGCG CCAGGrTTTA ACACTTCTGA AGATGTAAC	960
	TTACCAGATT TGTCCGTTGT GTATTTCAAT TCTTTCTTCT TACCACGcAA TACATCTTCA	1020
30	TATTGATATT CTAGGTAAGA TTTTCCAACA CGATCATTGC GTGAATATCC TTTGGATAAG	1080
	TAATGTTCTG TCAATTCTTT TGGaATACCT TCAGCAGGTG TCGATACATC TCCGAATATA	1140
	CCTCTTAAAG TATCGCCATA TGGATATTTT CTATCCCAAT CCATAGACGT GTTAACACCT	1200
35	GGTAATTTGG AAAGTTGCTG AGAAACTGCT GCATACTCTT TTCACTGAC ATCTTCATTT	1260
	TTTATCATTT GTGGATCTAA AACTGTTCTT GGCATTCATC TCTCGAAAA TAGCTAAAC	1320
40	TTGGTAAATC TTTAGAAGAC AATTCATCTA ATTGTGGATT TTCCGGATTT CGGATAACAG	1380
	TTGGTnTATC CATAATGGAT CCTGGTTTAA TACCTTCCAn CnGGCGAACA TAGCC	1435

(2) INFORMATION FOR SEQ ID NO: 597:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 516 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 597:

	AGAAAAAGAT TTAGAAAAGA TTACCATTCTG CGACATAACA ACACGCGCTG ATATCAATAG	120
	AGGGACATTT TACTTACATT ACGAGGATAA ATATATGTTA CTCGCAGATA TGGAAGATGA	180
5	GTATATTTCA GAACTAACGA CATATACTCA ATTTGATTG TTACGCGGTT CTTCArTTGA	240
	AGACATTGCG AATACTTTTG TAAATAATAT ACTCAAAAAT ATTTTCCAAC ATATTCATGA	300
10	TAATTTAGAG TTTTATCATA CTATTTTACA ATTGGAACGC ACGAGTCAAT TAGAATTGAA	360
	AATCAACGAA CATATTAAAA ATAATATGCA ACGTTACATT AGTATCAATC ATTCTATCGG	420
	AGGCGTTCCA GAGaTGTATT TTTACAGTTA CGTTTCCGGA GCAACAATTT CaATTAnnTA	480
15	AATACTGGGG TAATGGACAA ACAGCCCATT TTCAGT	516

(2) INFORMATION FOR SEQ ID NO: 598:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1955 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 598:

	AGTACTTTAC CATGAGGTAA GACTTTATTC CCTGCTTTTA TAGATTGTGC TTTTATTTGT	60
	GTGCCAGAAC CAATAGtAct GGTcTAATGA TTTTGCACTC ACATTATCAA TAGCTTTTTG	120
30	TTTGTCTTGA CCTTCAACAT CTGGCACTTT ACTATACTCT GCATTAGATG TGTCACTTTT	180
	TGATTTACCT ACATTTAAAT ATTTCAAAGT ATTTTCCATT ATTGGTTTAA ACGCTTTACT	240
35	AACACCTAAT TCATAAGCTT CTTGGTCATT TTTTGTGCC AAGCTCATAC CAGCGTATAC	300
	AATAACTTTA GGATTTTTCT TCGGCGCGTC ACCCATAAAA CTTACAAAAT ATGGGTTTGG	360
	ACCTTTAACG TATCCACCAC CATTAGGTGC AGCGACTTGT GCTGTACCAG TCTTACCTTC	420
40	GACCTCATAA CCATCAATAC GATAGTTTGC AGCGTGACTC TTCTTACTAT TCACAACATA	480
	ATCCAATTGC TTTTCAACTT TTTCAGCAGT ATCTTTTGTT ATTGGTTTGC CTGCGATTTG	540
	TTTTTGCCCT TTATAAAATT GTCTTTTACT AACAGGATTT TCAACGCTAT TCACAAACCA	600
45	TGGTTTTAAC ATATTACCAT CATTAAAGAA CGCTGATTGC GCTTGTAACA TTTGAACAGG	660
	TGTTACTGTT GTCGATTGAC CAAATGATGA CGTTTTTTGt TGCAACTCAT TACTCCATCC	720
	AATTTGaCCA GGTGCTTCTC CATCAAACAT ACCTTTAGTT GaTTTTCCaA ATCCaAATCG	780
50	TTCATACCAA GATTTCAATT TGTCTGCACC AACTAAATCT TGTAATGCA TCATCAATGT	840
	ATTAGATGAA TAAGTAAATC CGAGTGACAT TGGGATTTCA CCCCACCGA CTCTATTCCA	900

AAAAGCACCT TCTTGAATAG CAGCTGCTAA CCCATATGAT TTAAATGTTG ATCCAGGCTC 1020
 GTATGTGTTT TGATAAAGGT CATTGCCCCA CTTTTTACCA AAGTCTTTAC CAGTTTCAGG 1080
 5 ATTAAATGTT GGTCGCTGAC TGTATGCTAA AATTTCTCCA GTTTTGGCAT CCATGACAAC 1140
 CGCAAATAAA TCTTTCGGCT GGTATCTTTC AACCATGCCA TCTAAAGCTT CTTCAACAAA 1200
 TACTTGAATA TTTGAATCGA TTGTTAAATG GACATCATCA CCACGTTTAG GCTGCTTCTC 1260
 10 TTTTTTAGTA TTTGGTGCGA TATATCCCCA AATATCATGA ATATATCTCA ATGATCCTTT 1320
 AGATCCACTT AAATAACTAT CAAAAATCTT TTCAACTCCA AGTGCACCTT TAAGTTCACC 1380
 15 AGTATCCGGA TTTTCTGAG CTCTACCAAT TAAGTGTGAT GCAAAATTGC CATTGCGATA 1440
 AAAGCGTTCT GTTTCAGGCA ATAAAGAAAT ACCAGGCAAA TTCATTTTCT CTATTTTCAA 1500
 TTTGTCCTGA TACGTTAAAT TTGTTCTTTC GCGTCCAAAT TCAATTTGGA AAGCTTTCTT 1560
 20 TTGACTAAGT CTCTTTTCAA TTTCTCTGG CTTCATATTA ATGACTGTAG ATAATTTCTT 1620
 TGCAGTCTCT TTTTTATCAA CTACATGCCT AGGTTTTTTA GAATTGGCAC TCGCCTTTTT 1680
 ATCTATTACT GCAACAAGTT TATATCTTTC TACATCTTCT GCTAGCACTT TACCATKACG 1740
 25 ATCATATATC TTTCTCGTT CTGGTTGTTG TGCATTCTTA ACTAAATACT TTTCAATTGC 1800
 CTTCATGACT AAATCTTGAC CATTAGAATG TCCAGTAATC ATGATATATG AAATCTTAA 1860
 AACCAATATA AAAAAGAGCA GTCCGAATAA ACCAACAAGT AGGACTGCCC CTATTTTATT 1920
 30 TTTTTTAATT TTAATTTTTT TGGTCGCCAT TACTA 1955

(2) INFORMATION FOR SEQ ID NO: 599:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 704 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 599:

TAGCAAGAGT AGGTGATAAC AGTTCCTTTA ACGTGTGCTG TGCTTGCTCA TTTCTTGGCT 60
 45 CATTGTAGAC TAAATATATA TAAGCGTTTT CAAATAAGTG CTTTTTAGCA TTTAGTACAC 120
 CAGATTTATG ACTACCAGCC ATTGGATGAC CACTGACTAA ATGAATATTA TGCTTTAATA 180
 AATTGCATTC GTGTTGCTGT ATCATTGCTT TAGTACTACC AGTATCAGAA ACAATAACAC 240
 50 CAGGTTTAGT TGGCATATCT ATAAGCTCGC TAAGATATTT ATTTGTGATA GCAACAGGTG 300
 TTGCATAAAT AATTACATCG GCTTTTTTAA TAGCTTCACT ATAATTTAAA CATTTTTCAT 360

TATTAGTATT AGGGTTATGG TATTTTATAT TGCTAGCAAG ACTTCCACCA ATTAATCCAA 480
 GCCCAACAAA TAAAACTGTT GTCATATAAA TCACCTTATT TCGAAATTTT CAGAATAATA 540
 5 ACATTGTAAA TGAGCTGTTG ACACAGTGCA ATAGTAAATA AAAATCGATA ATAGCATTAA 600
 TAGATAAACG GAGATAAATC ATCTACAATA AAGAGTATAG TAACACAATG GCAACGGAGG 660
 10 GGTAAATCAA TGGAACCAAT ATTAGAAATG ATTAAAACAT TAAC 704

(2) INFORMATION FOR SEQ ID NO: 600:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1158 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 600:

CCTCTAAAGG ATCACGAACC TTTTTCATCG TGAATAAGCC TATAATACCC TTAAAcCTAT 60
 TATTATTAAAC TTTTACCTCT GTGTATTCCC TATCAATTAG GCGACGCCAG TGACGTTTAT 120
 25 CTATATACTT TACTTTCACA GTCACCAACT CCTTGTCATT ATTATATAAA ACTACATAAA 180
 TGATGTCATG TCATGATACA GTTTTATAGT TTTTGTTAAT CATATGAAAA TATTTATTAT 240
 TATTTTACTA CAACTCGCTT CAATTTACTT AAAATAGACA ATATTAATTA GATAGTACAC 300
 30 ACATTTCTTC ATAAAAGTGA TTTTTCAAAA ATATAAATAA CACACTCTTA TCGTTTTCAA 360
 AATCATTTAA TGCTATTTTC ATTAAAAACA GCTGAAGCAT CAAATCTATT CTGATTCAAT 420
 CAAGAATACA TATAAAAATG AAGTGACTCA AAGGTTTATT AACAACTTC AAACCACTTC 480
 35 ATTGATCACT TTTATTTTAA AGCATATTTT TCGATTACTG ATTTAAGATG CGGATATTGC 540
 GTAATTAATT CAGATTGCTT AAACAATTCA AACTGCTTAA ACTCAAATGC CGGTTGACAC 600
 40 ATACAACCTA CTAAACTAAA AGTATTGAT ATTTGATTG AAGAAGCAAA AATTGTTTCCT 660
 TTAGGCACTA CATATTGCAA TACATCTCCA TTTTGGATAT CAGTACCCAA TGTTCAGTC 720
 GTATATTCCC CATCCGGATT TATCATATGA ATTGTTAGAG AATCGCCAGC ATGATAGTAC 780
 45 CATACTTCAT CAGCATCAAT TCGATGAAAA TGCGAAATAT TGTCATCTGT AAGTAAAAAA 840
 TAAATACTAC TAAACGGCGC TCTGCGTCCA TCTTTCAATA CTTCTCGAAT TGTCTCTCTA 900
 TAGAAACCAC CTTCAGGATG TGATTCAAGT TGCAATTcAT CaATCCATTG TTCTGCTGAT 960
 50 TTCATTATTT CAAATCCACA TTATGGAATA CGTTTTGTAC ATCTTCTAAA TCTTCTAATG 1020
 CATCGATTAA TTTTTCAAAT GTTACTTGGT CCGCTTCAGA AAGTTCAATA TCTGTTTGAG 1080

GAACGACTGC AAATTGAT

1158

(2) INFORMATION FOR SEQ ID NO: 601:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 827 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 601:

5	TGATACTTAT TTTTCAATAT TATTTGGAAT AAAnTCTTnT AATTGTGGTG TGAAATAAAC	60
15	ACCGAAATTC TTTTCAGATT CATCTTTTcC ACTACCTGCA TATAAAATAC CAATCAGTyC	120
	ATGTTTtagAA TTCAATACAG GAGATCCTGA ATTACCTGGT TGTGCATACG CATCAAATTC	180
20	CATAAACGTT CCACTGATAT GGTAAATCGT TCCTGTCGAT TCAAACATTT TATATTTTGT	240
	TTGTGCACCC TTTGGATAAC CAATAACAGA AATTCTATCT TTCACTTTTG CTCCGTCTGC	300
	AAATTTTGTA TAACTAACGT TCTTATTAAA ATTCAAACCT TCTGTACTTG TTTCATGAAC	360
25	ATGAACTATC GCAAGGTCTT CTTTCCGGG ATATTCTACA ATGTCTTTAA CGTCGTAGTT	420
	TCCTCCGCCT TTACCTTTAC TCGAATGATG TGCTGATACT CTATTTTTAA AAATATCATT	480
	ACTTTTAGCG ATATGTTTGT TAGTTACGAT TGTATTTTTA CCAACAACCTA CACCAGTACC	540
30	ACCCACAAAT GCTACCACTG aATTGTATGG TTCCTTAGTT GCATCGGTAA TTTCTTTGAC	600
	ATTCTTTTCT GCTTTGGCAA TTGAATGAxG CTGATTAGAA ATATTTTCAG CAAAACCAAG	660
	AGATGTTAAA ATAGTTAAAG CAGTTAAACC TTTAACCATT ACATTTTAT TCATATTTTA	720
35	CCTCCTTCCA AATTTATTTT nATAGTTAAT GTATCTAGAT ACACATTTAC TATATACATT	780
	TTAAATAAAA ATATTnATTA AATATTAATT AACCATTAT nAACGTT	827

(2) INFORMATION FOR SEQ ID NO: 602:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 796 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 602:

50	nGGnACGTAA AGTATTTATG TTAAATGGCA nAAATATATG AATGATGAGT TACCTGGATT	60
	ACCAATGTTC CAAGGTAAAT CGATAACTAT TGTTAACGAT AAAGTACGAA ACTTAGACAT	120

	CGACGATTTT GTCGAGGTTT ACTTATATGG GGGGATGTTA TGAATAATGT ATTGTTAGAG	240
	GTAAAGATT TAGAAACATC ATTAAAAATA AATAATGAAT GGTTAGCAAC TGTTGAAAAAT	300
5	ATTTCTTTTG AATTATCTAA AGGAGAAGTT TTGGGTATAG TAGGGGAATC TGGTTGCGGT	360
	AAGTCCATAT TAAGTAAGTC AATTATTAAA TTATTACCAG AAAAGATATC TAAACTAAGT	420
10	AATGGAGAAG TTATATTTGA TGGTAAACGA ATCGATACGC TCAATGAGAA GCAATTGCTA	480
	GATATTCGAG GAAATGATAT TGCTATGATT TTTCAAGAAC CTATGACTGC TTTAAATCCT	540
	GTATTTACCA TAAAAAATCA ACTTGTGGAA TCTATAAAAT CACATAAAAA AATTTCTAAA	600
15	AAAGAAGCAA ATAAATTAGC AAAAGATTTA CTAAAAAAG TTGGAATTGC TAGACAAGAT	660
	GAAATATTAA ATAGCTATCC TCATCAATTA TCTGGTGGTA TGAGACAAAG AGTAATGATT	720
20	GCAATGGCCA TTTCATGTTT TCcTAAATTA TTAATTGCTG aTGAACCTAC AACAGCATTG	780
	GATGTCACGA TTCAAG	796

(2) INFORMATION FOR SEQ ID NO: 603:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1618 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 603:

	GGATGTGTTT ATCCCAAATT GaAAcAgAaA TTTATGATCA AAtGATGTGG ATTGGTTTTA	60
35	AaCCATTCAa AATTaCCAAT ATTAmACAAG AATCTGAAGA CATTAAATCA TTTtACAGTT	120
	GAAACTGAAG AATATGACTT TAGTGAATTT ACACCAGGCC AATACATCAC AGTTGATGTT	180
40	TCTAGTGATA AACTTCCATA TAGAGCTAAA CGTCACTATT CTATCGTATC AGGTGAAAAA	240
	AACCATTTAA CTTTTGGCGT TAAACGTGAT GTCACAACAG AACATGAAGG CGAAGTTTCA	300
	ACAATTTTAC ACGATGAGAT TAAAGAAGGC GATATGATTA ATTTAsTGCG CCTGTAGGTG	360
45	GATTTCGTATT AGAGAATACG ACTGAACCAC AACTTTTCTT AGGTTcAGGT ATTGGTGTTA	420
	CACCTTTAGT AGCTATGTAT GAAGCTGCCT CTGCCAAAGG TTTAGATACA CAGATGGTTC	480
50	AAGTTGCTGA AAATGAACAA CATTTACCTT TCAAAGACAA CTTCAACAGT ATCGCAAGCC	540
	ATCATGACAA CGCTAAATTA TATACACACT TAnAgATAAA CAAGGCTATA TTGGTGCTGA	600
	AGAATTACAA GTATTTTtag CAAATAAACC TGAAATTTAT ATCTGTGGTG GTACAAAATT	660
55	CTTACAaTCT ATGATCGAAG CACTTAAATC TTTAAATTAC GATATGGATC GCGTACACTA	720

	ATATGAACT TAATCAACGT TACGTAAAAG TATTTGCATT ATATTTTCGTA AGTATTGTTA	840
	CTGCAAATAT TATTGTAAAA AATAATAATT TAATTAACAA AtTGATACAA ACCATAGCCG	900
5	GGTACACGGT CTTTGCAGTT GGTTTGAAGT ATTTAACTAA ACGTAAAAAT AAATGACATC	960
	TATACCAAAA CAGCTATGAC TTTACTTTGT CATGGCTGTT TTTTAATTGG GAGTAGGACA	1020
10	GAGATGATAT TTTCGCAAAA TTTATTTGGT CGTCCCACCA CAACATGCAT TGATGTATGC	1080
	TCACTGAATT TCATAAGAAA GGAGTTCACA AGATGACCGT AGATATTGGA CGGATTTATG	1140
	ACAATAAAGA TAATACCGAC GCTATTCGTA TCCTAGTCGA TAGAGTCTGG CCGAGAGGTA	1200
15	TTTCGAAAAG AACTGCTAAC CTAGATTATT GGTAAAAAGA CATTGCCCTT TCTACTGAGT	1260
	TGCGACAATG GTTCCAACAT GATCCTAAAC TTTTGGAGC TTTTAAAGAA AAATATGAAA	1320
	AAGAATTACG TGATCAGGAT GCGCAAAAAG ATGCTTTTGA AAAATTAAAG GATATTGTAA	1380
20	ATCAGCATAA TCATGTTCTA TTGTTATATG CAGCAAAAGA TACTAAACAT AACCAAGCTG	1440
	TAGTACTACA GCAGTTGCTC AATACTTAGT TATATATGTT TATCGTGAAT CACTATAAAT	1500
25	GTCGCTAACT TCATTTCTAA TATTTATTTT TAAAAAGCAT AATTACTACA ATTAATTGGA	1560
	ACTTTAATAA TTAATAAAT TGAACAATA TTTTACTTTA ACAAATAAA GTTTTAAA	1618

(2) INFORMATION FOR SEQ ID NO: 604:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 2115 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 604:

40	ATTATAATGC AAATATTGAA GCATTTAAAA CAGTCGCTAA AGCAGTAGGC AAAGAGAAAG	60
	AAGGCGAGAA GCGTCTGGAA AAGCATGATA AAATATTAGC GGAGATTAGA AAGAAAATTG	120
	AACAGAGTAC GTTAAAAATCT GCATTTGCAT TCGGTATCTC AAGAGCAGGT ATGTTTATTA	180
45	ATAATGAAGA TACATTTATG GGACAAATCT TAATTAAAAT GGGTATTCAA CCTGAAGtca	240
	mAAAArAmAA AACTACGCAT GTTGGTGAAC GCAAGGGTGG TCCTTATATA TATTTAAATA	300
	ATGAAGAACT TGCCAATATC AATCCAAAAG TTATGATTTT AGCCACTGAC GGAAAAACGG	360
50	ACAAAAATAG AACGAAATTC ATTGATCCTG CAGTTTGGAA ATCATTAAAA GCTGTGAAAG	420
	ATAACAAAGT TTATGACGTT GACCGAAATA AGTGTTTGAA ATCAAGGGGG ATTATCGCAA	480
55	GTGAAAGTAT GGCAGAAGAT TTAGAAAAAA TTGCAGAAAA AGCAAAATAA AAATACAGCG	540

	TGTGATGATT TACCTGAAAG TTTATTTTCGA ATAAATTTAA TTACATAACC GACAAGGATT	660
	GTTTTAACAG TTCTTTTAAT GAATTGGCGC ATCGTTACAT ACCTCATTTT TCTATATCTT	720
5	ACGAACTATA TACCCATTCA TATATGCTTT TTAAACGTCA TTGTCACAAT TTAATTTTTTA	780
	GGGAATATAA TATAACCATC TTTATCTGCT TTTTITAGTAA AAATGACAAA AATTGCATGT	840
10	ATTATTGaGA TGATGGTAGG GATACCTGTC CAGAAAAATA ATAAGTGAAA AAGACCTTGT	900
	CCAAATTTAT CAGCATAAAA TTTATGaATA CCTAAACCTC CAAGAAATAA TGCAACmATa	960
	ACATAAATGG CTTTATTGAC TTTCAATTTGT AAtCCTCCTT AACTATAATT CTACTTAAAT	1020
15	TCGTTGTGAA AACCAATATT TCTAACTTTA GAATTTTCAA ACTTTCTAAA ATTATAAGTA	1080
	TATCTTTTTTA AAATAAGCTA GAATTTCTAT ATAATAAATG TTAATAACGT AAAAGGGAAT	1140
	GATGACATAG TGATACGTCA AGCACGTCCA GAGGACCGAT TTGATATTGC GAAGTTAGTT	1200
20	TATATGGTTT GGGATGATAT GGAATTAGAA TTGGTAAAGC ATCTACCTAA AGACATGGTA	1260
	TTAGATGCAA TTGAAAAAAG CTGTGTTGAT GCAACATATC GAACTTTTTTA TCAGCATATT	1320
25	TTAGTTTATG AAGTAGAAAA TAAAGTAGCA GGTGTATT TAAGCTATAG TGGTGAAAT	1380
	GAATTGAAAT ACGAAAAAGC ATGGGAACTA CTTGACTTGC CAGAAAAAAT AAAACAATAT	1440
	GGCACGCCAT TACCTGTAAA AGAAGCTAAA GACGATGAGT ATTATATAGA AACAAATTGCG	1500
30	ACATTTGCAG CATATAGAGG TAGAGGCATC GCGACAAAGT TATTAACGTC ATTACTTGAA	1560
	TCAAATACAC ATGTTAAATG GAGTTTGAAT TGCGATATTA ATAATGAAGC AGCATTAAAG	1620
	TTATATAAAA AAGTAGGCTT TATATCTGAT GGACAGATTG AATTATACAA GCACATGTAT	1680
35	CATCATTTAA TTGTTAAATA AAATACTCGA CAGTTCGATG TAAGTCGATT GCCGAGTAGT	1740
	ATCATTTTCT ATTAAATGCC TGCAAATAAT GCACTAATAT AAATACCTAA TGCATATAAT	1800
40	AAACCGAAAA ATGTATTTGT TTTACCAGCA GCAGCCATTG CTGGCATCAT TGTAGGCGGT	1860
	GTATCATTCT TCTTGAAACG TCTGATAACT TTAACAGGCA TTGGGAATGA TAACAACGCA	1920
	AGTAAGTAAA ATAATGAGCC ACCAGGTTTA ATAATGATCG TAAGTACAAT AAAGGCATAA	1980
45	GCGATAAAGT ACATGATTGC CATAAATGTT AAAGAAGCAT TTTTACCTAA TAGAATGGGT	2040
	AAAGTTTTGC GACCACTTGC TTTATCTTTG ACACGGTCGC GAATATTGTT AGCCATATTA	2100
	ATTAAACCGA TAGTG	2115

(2) INFORMATION FOR SEQ ID NO: 605:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 1003 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 605:

5 TATGTCTCAA ACTCAAATTA ATCAAATGTT CCAGCAGAAA AACATGTCTA CTGAATTAAA 60
 ACGTCGTTAT GCACAACGTT TATTACAGTT TCCACATGTA CACAATAAAG AATACTTGAA 120
 ATCTTATGCT AAAAACCCTA AAGAAACTAA AGATAGTTAT ATTTCTGGTT TTAAAGAGAA 180
 10 TCAATTGATT AAAATAGAAG CGATTAAATC ATTGTTTGCA ATGGATAAAT CTCCATTAGA 240
 ACATGTTAAA CCTGCTACAA AACCAGACGC TTCTTGGGAT GAGATGAAAC AAAAAGCAGT 300
 TGAAATTGGT AAAGCTGATA CTACATCGAA TAAATTTGGT ATTAGAGATC AATACTGGAA 360
 15 ATTAATTCAA GAAAGTAAGC GTAAAGTTAG ACGTGACTAC GAATTCAATG TTAATTCTCC 420
 AGAATTCCAA GATTTAGAAT TACTTGTAAG AACAATGCGT GCTGCTGGTG CAGATGTTCA 480
 20 ATATGTAAGT ATTCCATCAA ACGGTGTATG GTATGACCAC ATTGGTATCG ATAAAGAACG 540
 TCGTCAAGCA GTTTATAAAA AAATCCATTC TACTGTTGTA GATAATGGTG GTAAAATTTA 600
 CGATATGACT GATAAAGATT ATGAAAAATA TGTTATCAGT GATGCCGTAC ACATCGGTTG 660
 25 GAAaGGTtGG GTTTATATGG ATGAGCmAAT TGCgAAACAT ATGAAAGGTG AACCACAACC 720
 TGAAGTAGAT AAACCTAAAA nTTAAATAC AAATAGCACA TAACTCAACG ATTTTGATTG 780
 AGCGTATGTG CTATTTTTAT ATTTTAAATT TCATAGAATA GAATAGTAAT ATGTGCTTGG 840
 30 ATATGTGGCA ATAATAAAAT AATTAATCAG ATAAaTAGTA TAAATAACT TTCCCATCAG 900
 TCCAATTTGA CAGCGAAAAA AGACAGGTAA TAACTGATTA TAAATAATTC AGTATTCCTG 960
 35 TCTTTGTTGT TATTCATAAT ATGTTCTGTT AACTTAATAT CTT 1003

(2) INFORMATION FOR SEQ ID NO: 606:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1097 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 606:

GCTnTTATAT TTAAAAAATT TATTnGCGGA TAATTACCTT TATTAAATCC CACCCATTAG 60
 50 GAwTaCGAGT AATAGGACTA ATACTGGAAT CACATAATGT AACATAACGT CCCTCCTTTA 120
 ACTTAATTTT AATTGTAATC AAATTTGACA ATAAGTCAAA mCATTAAATAC CTATGATArG 180
 TATCATTTAT TAACATATGT ATCATATTTT TAATCTTGCG TAATTTTTAT CGTTAACTAT 240

	CTTTTGTCAT TTTAATTATG TTAAGATAAT AGTAGTTATA GAAGTTCAAT CTATAGGAGG	360
	CATAGCATGG ATATTCCAAA AATCACGACA TTTTAAATGT TTAATAACCA AGCTGAAGAA	420
5	GCTGTAAAC TATACACAAG CTTATTTGAA GATAGTGAGA TTATAACAAT GGCTAAGTAT	480
	GGTGAAAATG GACCTGGTGA TCCCGGGACT GTACAACACT CAATATTTAC ATTAAATGGA	540
10	CAAGTATTCA TGGCGATTGA TGCTAATAGT GGCACAGAAT TACCAATGAA TCCTGCGATT	600
	TCATTATTTG TTACAGTAAA AGATACTATT GAAATGGAAC GACTATTTAA TGGATTAAAA	660
	GATGAAGGTG CCATTTTAAT GCCAAAAACG AATATGCCAC CATAACAGAGA GTTTGCTTGG	720
15	GTTCAAGATA AGTTTGGAGT AAGTTTTCAA TTAGCATTAC CTGaGTAAAA GGATTGCGAC	780
	AGCtTGgAAT GATAAAGAAA CACTTTTTCT TATGCATGCG TTTTACCTAT GTATTTCTAT	840
20	TTTAAGTACA CATTAGCATT TTAGTTTCGC TCATTTTAA AATCACAAAG ATAATTTGTA	900
	ACTTAAATGA TGATACGTTA TTTAAAAACA CGATACTTCG TTTCAATGAA CGCATTAAAT	960
	AATAAATAAA CACCTCACCA TAAGAAAGGA CTACTTTCTT TTGTGAGGTG TTTatTTGTC	1020
25	GACAACTTGA TTATGATTGT TTCATTTTTT GAATAAGTTC ATAATCAGGT GTAGCATACA	1080
	AAGTTTTTTG ATTGTCA	1097

(2) INFORMATION FOR SEQ ID NO: 607:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 2031 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 607:

40	GAGGTCTAGC ATGTCTCGTT CAAAAAATA CTTTTACTTA TCTAGCTTAA TGATTATTTT	60
	AAGCTTTTTTC TTTAATACAA ATAACGTTTT CCTAAGTGGA CTTTTTAATT CTTTTATTAA	120
	ATTAATACTT TTCTGCAGTG TTATTAAGTC AATTGTACTA ATTTTGTCTA TAATTTTTGC	180
45	AGATCGTTCA ATTAAATCAC TAAAGCCTGA TGCAGATTGG ATTAGAATTG CGAGTAAAAG	240
	TTTGCCTTGG aTTATTCTAA TTGTTATTTT AGTACATATC TTTTCAATTG TTCGTACATT	300
	CGGTTTTATT TAAAAAGTT AATATGTCAT TGTAGCCTTA ATACAAAACA ATACAATGTA	360
50	TCATGCTATA ATGAGTAAAA CAATTTGATA ACGTTGTTGC GTATAAAAAA TATTAGATTT	420
	TCGAAATCAT AACTATGCAT CTAATCGCTA TAGTTATACA ACAAGATATA ACATATAATG	480
55	AGGTTTGATA ATGCATCGAC AATTTTTGTC GTCGCGTTGC CAAAACCTCT TTTTTAAATT	540

	TTTAGGCGCT TTATTACGTT ACCTCATTTC TTTTCTGAAT ACTGACGGAG GTTTTCCAAT	660
	CGGAACACTG ATAGCCAATT TGA CTG TGGTGC CTTTGTAATG GGATTGCTAA CAGCCTTAAC	720
5	AATTGCATTT TTTTCAAACC ATCCGACCCT AAAAAAGCT ATTACGACTG GTTTTCTTGG	780
	TGCTTTAACG ACTTTTTTCAA CATTTCAATT AGAATTAATA CATATGTTTG ATCATCAACA	840
10	ATTTATAACT TTACTACTAT ATGCTGTAAC AAGTTATGTC TTTGGTATTT TGTTATGTTA	900
	CGTCGGTATA AAAGTAGGTG GTGGTTTATC ATGATATCAA TCATTTTAGT CATGATTGGC	960
	GGCGGTTTTG GCGCAATTGC TAGAAGTGCC ATTACTGATT ATTTTAATCA TAAATTTACT	1020
15	TCAAAGTTAC CTATCGCAAC ATTGATAGTA AATCTAGTTG GTAGTTTTTT AATTGGATTA	1080
	ACTATAGGCT TATCAATTTT AATCTCATGG TTCCCTGCGT TCTTTGTTAC CGGTTTTTTA	1140
	GGTGGCTTAA CAAGTTTCTC AACGTTAGCC AAAGAACTTA CACTAATGAT GACGCCAAAA	1200
20	TTTAATATTA ACCTTTTTTCT CAATTATTCA CTTTTACAAT TCATCATTGG ATTTATAGCT	1260
	TGTTATATTG GCTATCATAT TAAAAAATAA AATGCTTCAT TCAGCAAATA GGTAATTAC	1320
25	GACACCTTCC TGAACGAAGC ATTTTTTAAT TTTCATGCAA ATTTTTAAGC ACCATATAAT	1380
	GCCTACCAA TTTCAATAAT CTTTGTTGCC GTTTAAATAA TGTGAATGTC AATAAATTCT	1440
	CCAACTAGT CGAAAATAAA GGGAGTGGGA CATAAATCCC TAAAAAACA GCAGTAAGAT	1500
30	AATTTTCAAT TAGAAAATAT CTTACTGCTG TTCTCTATTT ATACAATACT TCGTATTGAa	1560
	TGGcTTGCT TTCCTAGGGT GCCGTCTCAG CCTCGGcTTC GACTGGCACT GCTCCCTCAG	1620
	GAGTCTCGCC ATTAATAcTA CGTATTAACA TGTAATTTTA CTTTACATA CTTTAAAAAA	1680
35	TAAGACACTT TGCCCAACTT AACTACCAA TAGAAACCTC TGTTAGAATT CCTCAAAATG	1740
	ATATTTGCG ATATGTTAAT GAAATTGTTG AAACGATACC TGATAGCGAA TTCGATGAAT	1800
40	TCAGACATCA TCGTGGCGCA ACATCCTATC ATCCAAAAAT GATGTTAAAA ATCATCTTAT	1860
	ATGCATATAC TCAATCTGTA TTTTCTGGTC GAAGAATAGA GAAATTACTT CATGACAGTA	1920
	TTCGAATGAT GTGGTTAGCT CAAAATCAAA CACCTTCTTA TAAACTATT AATCGTTTTA	1980
45	GAGTGAATCC TAATACTGAT GCGTTAATTG AATCTTTATT TATTCAGTTC C	2031

(2) INFORMATION FOR SEQ ID NO: 608:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 687 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

TCCCCGGGAA TCGAACCCGC GAnCTCCTGC GTGACATGCA GCGGTGTTAA CCGCTACACT 60
 ACGAGACCTA TTAnATTAAA AACTATGTAT TGCGGGAGGC GGATTTGAAC CACCGACCTT 120
 5 CGGGTTATGA GCCCCGACGAG CTACCGAACT GCTCCATCCC GCGCTAATAT TATTTTGAAT 180
 TACCTAATTA ATATACCATA ATCAAAAACC TAAAGTsrrG AACTTTTTGA ATTTAATTTA 240
 AATGTTATCT CTTAAATAAT TACTTAAATA TCGTAGCAAC ATGTTCTCTG TTGAACACAA 300
 10 ATATTAGTAT ATTCATTTTT GTAGTGACG TCAACGACAT TTTCAAAGTT TTTGTGTAA 360
 AAAAACGCTT CTTATTCCTT TTTATCATAT AAGTGTCTAA TAGTTGTCAT AAATAGTGkT 420
 AAAGCATTTA AAAAGGTATA GGAGTTATAA AGTTTACAAC GCCTATACCT TCTGAAAAAG 480
 AAATTATAAA AGCTTGTTAC ACCGCATATT CTTTCAGTCA GCGACTACCA ATATAACATT 540
 GTAGCCctAA GACATTGCTT GACGCCTCAn TTACAACAAT TTTTCAAAAT CAGCAGCTAC 600
 20 CTACTGACAC AACATAACAC AACCChTACA CTAnCTATCG TGTCATGTAA TCTTGCATCC 660
 GATCTTGCAA CGCTGTAAAT GTTTCGA 687

(2) INFORMATION FOR SEQ ID NO: 609:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 843 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 609:

GTGTTGAATA CTTTGACAAA ATGAAATCAT TTGTTCTTTC GTTTCAAATT TAACTGTTTG 60
 AATTAAATCA GTTCGTTTTT CGTAGTACTT CGGCGTTGTG TTCATATTCA TTTTCTCTAA 120
 AAATAAACTA GTAAACAATG CACCTTTAAG ACTCTGACTG ACAACGTGTG GTGCTAAAAA 180
 40 GAAACCTTGA TACATTTCAA GCAATGCATT TAATGATGCA CCCGCTTCTT TACCAATACC 240
 AGGTGCTGTC AATCTATAAC CACATCGTTC AATTAAATCT TTTCTACCAG CAATGTATCC 300
 ACCAATCTTA GCTAAACCAC CGCCAGGGTT TTTAATTAAT GATCCTGCTA TTAAATCGGC 360
 ACCACATTCT ATAGGTTTAC GTCTTTCAAC AAATTCCCCA TAACAGTTAT CCACAAATAT 420
 TAAAATATTA GGATGCACGT TTTTCAACCT AGTAATTACC TTTTCAATTT CATCTAGCGG 480
 50 AATTGAAGGT CTTTGATCAT AGCCTTTTGA ACGTTGAATC GCTATTACTT TGGTGCCTC 540
 AGAAACCCCa TCTAACACAC TTTCAATATC GATCTTACCT TCTTTAAGTG CAATATCTTT 600
 ATACGATmCG CCATGCTCCA TTAAACTTTC AATACCATTT CCGTTTACGC CAATGACTTC 660
 55

ACTTTGTAAT GCAATAGTAA TCGCATGCGT ACCTGAAATA ATTTGCGGAC GAACAATTGC 780
 ATCTTCTGCT TTAAATGCCT GCGCATATAT TTCTTAATTG AACGAATTGA GAACTAATCG 840
 5 TAA 843

(2) INFORMATION FOR SEQ ID NO: 610:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 775 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 610:

GATTATTATA AACCGAATGA AACAAAAAAG TTTTACATA TTTCAACAA CTTTATTTCA 60
 20 ATAAAGCATC AAGTTGATCT AAAGTTTGAT TCATACCTTG TTCAACACCC ATGTTTATGA 120
 CTTGTTGAGC GGCTTCTTTT GTTGGAATA CCGATGTTGA TGTCACGTGC GTTTTCGTTG 180
 25 TATTGCTCTT GGAAAATGAC AAAGTAATTT TCATGCTTGG CATTTTTGTA TCTTTTGCAC 240
 CTTGAGGTGT CGCAAATGAG TCAATATATT CAATTAAATA TGGACGCTTA ACCGTTTTAT 300
 ATTCTGCTAA TGTATAGCTG GTCATTGTAG GTGTTTTAAT CGCATAAAAT GCATCACCGC 360
 30 CTGAAACAGC ATTAAAGCGA AACACTTTGG TACTAGCGTC TTTTGGATGA AACCATTTTT 420
 CAAATAATGC TTTkGTCGTA TAGGCATCAA ACACCTTTTC AATCGGTGCT TCTATCGTTC 480
 TTGAAAAAAT AATTTTATTA TCTTCAACTT TAATCGTCAT CTTCCCACTC CCTATCTTTT 540
 35 ATATTTACTC ATCTTAACAT GCATTGAGTA ACATATGTGA CCAAATCATT TGTTATAAAC 600
 TATAGTAATA TTAATCATTC CCTCTGTnGA AATTGATAAC TACGAAATAA AAAACACACT 660
 CTATTCAGCT ATTAACAGTT GAGTAGAGTG TGCAAACCTG TTGAATTAAT GCGCTAACAT 720
 40 TTCTTCTTTG ATTTGGTCTT nAInTAATTT TGAAGGATAA TATGTTGGCC AGTTA 775

(2) INFORMATION FOR SEQ ID NO: 611:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 728 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 611:

ATCAAAATTT GATACTAAAG GGCTCACGCT ATTTTATGTA TTTATTGGAT TGATTATGTT 60

TGTGGCAATG TGTTTATTTA AAGTAGAAAA ACATGTTTCT TCACCATTTT TACCTGTGGT 180
 TGAATTTAAT CGTTCGATTA CTTTAGTTTT TATAACTGAC CTTCTAACAG CTATTTGTTT 240
 5 AATGGGATTC AATTTATATA TTCCAGTCTA CCTTCAAGAA CAACTAGGAT TATCTCCATT 300
 GCAAAGTGGA TTGGTTATTT TTCCTTTATC TGTAGCTTGG ATTACATTGA ATTTTAATTT 360
 10 ACaTCGAATT GAAGCAAAAC TATCAAGGAA AGTTATTTAC TTA CTATCAT TTACATTGCT 420
 ACTAGTAAGT AGTATTATCA TTTCAATTTGG TATTAAATTG CCGGTACTTA TAGCATTGTG 480
 GTTAATTTTG GCAGGATTAA GTTTTGGATA TATTTATACG AAAGATAGTG TGATTGTCCA 540
 15 AGAGGAACT AGCCCATTTAC AAATGAAGAA AATGATGTCA TTTTATGGAT TAACTAAAAA 600
 TCTTGGGGCA TCAATAGGTT CAACAATAAT GGGATATCTT TATGCGATAC AATCAGGAAT 660
 CTTTGGTCCA AACTTACACA nTGTGTTAAG TGCTGTTGCT GTAATTAGCA TGGGCTTATn 720
 20 GTTTTATG 728

(2) INFORMATION FOR SEQ ID NO: 612:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 913 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 612:

TATCAGAGCA AATAAGCAAG TTAGATAAAA AGATTTCTGA CTTACAATTA ATTAGACGCT 60
 35 CTGTATGTGA ATTTATTAAA GGACTCTCTC TAATAGATAC CAGCATTTTA AACAAGACAC 120
 TACAGTCACA ATATGATAAA GAAGCATCTA TAAAATATGG TCATACGAAA GCATATCAnT 180
 CATTATTAG ACGTAAAGAC AGCTTACAAT CGCAGGATAT CAGACATAAA TTGACAACTA 240
 40 TCTTCAATAA ATTTAATCAT ATGTCTTTGA GTCATTATCC AATCCAAGAT TGTAGTGATC 300
 TCGTATTTGA GTGGAAGGCA TTTATGAACA CTATCGCTGA TTTTGmTGAT GAAACATTAT 360
 45 GCTGTATTGC TAAAACATAT GAAGATGATA CGCGTTTCAA AGATTACTTT AATTCATATG 420
 ATAATCAAAA TTTAGCATCA TACATTTTCTG AAGCTGTAA TTATTTTTTG AGCAATGTGA 480
 ATAAGAGCGA CAATTTTTTA TCCTCATACA GATGCTACAA CACTGAATAC ACCAACTAAA 540
 50 ATAATTGTTT AAAGTAGAAA ACTAATCATT TATTCTCTAA ATCAATAACT ATATTAAAAG 600
 TTATACCTTT GCAAAGCGAA TTAGTATAGG TTACCGAAAG GAGAAAGGAT TAGGTTCCAT 660
 55 TCGATTTATA AAAAAATATA TTTCGAAACA TACAAAAGCG CCAGAAGATA ATCATTTTCT 720

TCAATGCATA TTCAACTAGC TCAGGTTTAC TCTTTAAGCC AAGCTTTGTC ATAATATGCG 840
 TCTTATGTGC TTCTACTGTT TTCACAGATA CAAATAATTT CTCTGCAATT tCTTTATTCC 900
 5 CGTAACCTTT GGC 913

(2) INFORMATION FOR SEQ ID NO: 613:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 654 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 613:

ACAAGTGTTG ATGTCATAGT AGCGTCAAWT GTGCTTTATT TCTGGGACAC ATTTAAATTT 60
 20 TTCCACCCCA TTACTTGGAG CTTAATCTTT ATTACAATTT TACTATTATT AAACATTTTT 120
 TCTGTAAAAT CATTTGGAGA AACTGAGTTT TGGTTATCAT TGATTAAAGT GTTAACAATT 180
 ATCGTATTCG TTATTTTTGG CTTTTTAATG ATTTTCGGTA TCTTAGGTGG TCATACATAT 240
 25 GGATTTGAAA ACTATACAAA AGGCCAAGCA CCGTTTGTTG GTGGTATCTC TGGTTTCTTA 300
 GCGTATTAT TAGTCGCCGG ATTTTCGGTT GGTGGTACAG AAGTAGTAGC AGTAACTGCT 360
 30 GGTGAATCAG ATGACCCTAA AAAGTCTATG CCTAAGGCAA TTAAACAAGT ATTTTGGCGT 420
 ATTCTTTTAT TCTATGTCTT ATCAATTGCA GTAATTGGTG CAATTATTCC GTACACAGAT 480
 CCATCATTAT TAAGAGCAAG TAGTTCAATA AGTCAAAGCC CATTTACAAT TGTATTTCGAT 540
 35 AGAGTAGgCA TAGCCTTTGC AGCATCAGTA ATCAACGCGG TTATTTTAAC TTCATTATTA 600
 TCCGCTGCAA ATTCAGGTGT TTATACAACA GGCAGAATGT TGTATTCCTT AAGT 654

(2) INFORMATION FOR SEQ ID NO: 614:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 642 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 614:

TCGATCTTTA TTGATAATAA TTAAATTGTC GCCTTTAAAA TGTGATATTA ATCCTGCGGC 60
 50 AGGnTGTACA ACGAGTGATG AACCTAGTAC AACAAGGGTG TCAGCATGTT CAATTTTATT 120
 TAATGCCCTT ATGATGGTAG GTTGATCTAA CATTTACCG TATAATACGA TGTCCGGTGC 180

ATAAGATTTA TGACATACAT TACAATAAAA ACGATTTAAC GTGCCATGTA ATTCATCAAC 300
 ATGTTGACTT CCAGCGTCTG AGTGCAAACC ATCGATATTT TGCCTGATGA CACCTAAAGA 360
 5 TTGTTGATTA CGTTCTAATT TTGCAATCCA ATCATGAACG ATATTGGGCA TCGTATCGAC 420
 AAATAGTAAG CGCTTATGGC AGAAATTGAT AAAACCTTCA GGATCATCTT CTAAATAATC 480
 10 ACGGCTTAAC AAGTATTCTG GCGAAAGCCC ATCTTTTGaA ATTCATCAA ATAAGCCACC 540
 CATTGaACGG AAATCTGGAA CGCCACTTGC GACAGATACA CCAGCACCTG TAAAAAATGT 600
 AATACGATTC GAACTATCTA TAATATGTTT TAGTGTCTCT AA 642

(2) INFORMATION FOR SEQ ID NO: 615:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1210 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 615:

TTTCCCCnCC CnCCAAATA TCCAAngGAA CTTTAATAGT CCAATTGGCA CAGTAAAACT 60
 ATGGCATT TTT ATAAGTATAA TATATCTGTA ATTTATGGTC AATTAGTAAA TTGTTTTTTTA 120
 30 TTTGAAACAT ATTTACATc AAAATCACAA AGACTTTTAG ATTTTGtTCT AAAAATCTCT 180
 TAATAATTTA TTTAATGAGA AGAGTTGCTT ATATAGTAAA TTGTGAAGCC GTTAAACAA 240
 CGTTACAAAA CCTATATCTT TAATACGGAA CCATATGGTA TGAATCAAGG AATACTTAAA 300
 35 CTAAAACTTC TCTATCAGAT TTATTTGTTG CGAAATCAAC AACTTTAATT GCTTGCCCTT 360
 CATTTAATGG ATAATTTGCT TGCCTAATTT TAACTTTTAC AATTTGACCT ATGAGTGATT 420
 CGTCACCTTC AAATTGTACT TTCATATAAT TATCTGCATA TCCAAC TAAT GTACCTTCTG 480
 40 TGtCACCTG TTCCTCAGGA ATTACTTCAA GCACATCTTG ATCAAATTTA GACGCATATA 540
 ACTTTCCGAG TTGATTGCTT AGCGTAATTA ACTTATGCAC CCGTTCAATTT TTAATTTCTT 600
 45 CATCAATTTG GTCATCCATT CTTGCAGCTG GCGTGCCAAT TCTAGGAGAA TAAGGGAAAA 660
 CATGCAGTTC AGAGAACTTA TGCTTTACGA TAAATCATA TGTTTCTTGG AACTCAGCTT 720
 CAGTTTCACC TGGGAAACCA ACAATTACAT CACTCGTAAY TGCCAAGTCT GGTAAGCTT 780
 50 TATGCAATTT TGTTAATCGT TCTGAAAATC TATCCATTGT ATACTTACGT CTCATACGTT 840
 TTAATACTGT ATCTGAACCA GATTGTAATG GAATATGCAA ATGACGCACA ACTTTTGTG 900
 55 AACGTTCTAA AACGTCAATT ACTTCATCTG TAAGTTGACT TGCTTCAATT GAAGAAATTC 960

CTTTTAAATC TTGACCATAT CCACCTGTAT GAATTCCCGT CAATACAATT TCCTTATATC 1080
 CTGAATTCAC TAGTTGCGTC GCTTGTTCAA CTACTTTTTC CGGATCTCTT GAACGCATTA 1140
 5 AGCCACGAGC CCATGGAATA ATAcAGAATG TGCAGAAAGTT GTTACAACCT TCTTGAATTT 1200
 TTAATGACGC 1210

(2) INFORMATION FOR SEQ ID NO: 616:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 652 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 616:

20 TAATAAAATA CAATACTTTT CAATACAGAG AATCCCGCAA TGTCGGGATT CTTATTTATG 60
 CTGAATTTGT TTTTGTCTAT GATCAGGGAC TTTcAGGGAC TCAATTAATT ATCACATTCA 120
 TATTTTCTTA TGACCAAATT GATACATATG ATGCTATTTA ATGAGAAAAT TAGGCATCAC 180
 25 TTGGTTATTG AATTTCCCTC ATTAACTTTT CCAGCTCAAT TTAATAGTTA GTCGACTATT 240
 ATTCATTAAA CACTTTTTTAA TCATAAAAAA GTGTTTTTTGa TAATTCACTa CCaAAAACAC 300
 CTTCTTACTT ATAATTCTAT TTGTTCCACCA TTTCTAATCT TATCGGCTAA ATCATTCACT 360
 TTTCTTAATC GGTGATTTAC ACCTGATTTT GAAATTGGAC CAGTTGATAC CATTTCTCCA 420
 AGCTCTTTCA ACGAAATTTT TTGATGTTCT ACTCGAATTC TAGCAATCTC TCTCAACCTG 480
 35 TCTGGTAAAT TTTCAATACC AATTTCTTTA TCAATCAATT TAATGCTCTC AACTTGTTTC 540
 ATCGCAGCAC TAACTGTTTT ATTTAGATTG GcCGTTTCAC AATTAACGAG TCGGTTAACA 600
 GAATTACGCA TATCTCTTAC AATACGTACG TCTTCAAATT TTAATAACGC TT 652

(2) INFORMATION FOR SEQ ID NO: 617:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 798 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 45 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 617:

50 ThACCACTTT AAAATAGCGC TTAATAAAAtG AAGGGGGCAA GTCTTATGAC GtTTTACaAT 60
 TTCATCaTGG GTTTTCAAAA TGtTAACACA CCATTTGGTA TATTGGCCGa ACACGTTAGT 120

TCTAATTACA CAGATCATCA ATTAATTGAA ACTACAAATA GAGCTATTAG CTTATATATG 240
 GCAAATTAAT TTGAGTAGTA CCAATTATGA TGTATTAGTG CATCCCAAAT ATCTTTTGTT 300
 5 TTAAGTTTA TTTCATCATT TCTTATCGAA AATGGTGTA TAATGTCTTT ATCTAACCAA 360
 GTGTTGATAA GTTCATTTGG TACACCATCT AACACATTT CACTTTTACT AATTATAAAA 420
 10 CATTCCCAGT CAAGTGAAAC ATTTTGTGGA TTCACATAAT TACATTGATT ATGATTATCC 480
 ATAAACACTC ACTCCTTTAA AATTCTGTAC TCTTCATTGC GTTTTACCCC GTCACATTAT 540
 CTTTTAAACT AAAATCATCA TTACTTATGA AAAAAATGTA CATCAAAAGC AAAGGTTTTC 600
 15 GCTACCGAAA AAGTTTAAAT AATGGTtAA TATATtGGT ACTCATTTTA ATAAAAAGAG 660
 AATACATTTT GAGCTATCAA TACTTTTTAT TGAAGAGGTG TTATTsyTGG CTAAAACGTT 720
 ATATTTAATG CGCCACGGAC AAACTTTGTT TAATTTAAG GGACTAATTc AGGGATTGTT 780
 20 AGATTGCGCCG CTAACAGA 798

(2) INFORMATION FOR SEQ ID NO: 618:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1786 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 618:

ATACGCTCAA TTGATAAAAA TTAAATATCT GCCATTTGTA TACGCATCGC TTCGAATGTT 60
 35 TCCGTTGCAA TATCAAATGA TAATTGTGAC TGGAACTTA AACATCGAAT CATACGTAAA 120
 GCATCTTCTT GGAATCGTTC CTCAGCTATA CCTACAGTTC TTATTATTCTG ATTATTAATA 180
 TCTTGTTGAC CATCAAAATA ATCATACAAT TTGTATGCTG TATCCATTGC TATCGCATTC 240
 40 ATCGTGAAAT CTCGTCGTTG CAAATCTTCG TATAAATCAC GAACAAATGT AACACCACTT 300
 GGTCTACGGT GATCGACATA ATCTTCTTCA GCCCGGAATG TTGTCACTTC ATAATTTtCA 360
 45 TCATtAAAAa CTACATTtAT CGTGCCAtGT yCTThACCTA CAGGTATCGT ATGACTAAAG 420
 ATAGATTCTA TTTCATCCGG CGTTGCACTT GTTGTGATAT CTATATCATG AATATTTCTT 480
 CCCATGACAT AATCTCTTAC AGAGCCACCT ACATAATATG CTTCAAAACC ATTGTCTTGA 540
 50 ATTTGTTCTA ATATAGGCCT TGCCTGTTCA AATAATGATT TATCCATATT ATTACTCGCC 600
 TTTACTTTTG TTATGCTCAT TTAGCATTTT TTGATAATAA TACTCATATT GATCTGTAAT 660
 AAGTTCTGAT CCAAAACGTT CAGCAATATC TGCTAGCATG TTTTCTGAA GTTTGTTGTA 720
 55

	ATCTACGACA AATCCAGTTT CACCATGTTT AATAACCTCT TTAATTCCAC CGGCATTGTA	840
	ACCAATTGGA ACGACGCCTG TwTTCATAGC CTCAAGTAAA GTTAGTCCAA AGCTTTCTTT	900
5	TTCACCTAAT AATAATACTA AGTCAGATAA TTGGTAAAAT TCACTTACGC AATCTTGTTT	960
	CCCTAAAAAT AAAACATCCT CTTCTACGTT TAACTCTTTC GTCAATTGAC GCATTGGCAC	1020
10	TAATTGAGGA CCATCTCCAA GTAAAATTAA TTTACTAGGT ATCTTTTCAC GTACTTTTGC	1080
	AAATGTTTCT ATAATAGTAT CTATGCGTTT TACTTGTCTA AAATTGATA CATGTATTAA	1140
	CACTTTTTC TCTGGTGCTA TACCAAATTG TGATTTTAAT GCTGTGTTAT GTTTAGTTGG	1200
15	AAACTCATTT TCACGTACAA AATTATAAAT CGGTATAATT TCTTTGTTAG TTTCAATAAT	1260
	TTCATGTGTT TCTTGTGCTA AAGATTTACT CACACTTGTC ACAATATCAC TTTTTCAT	1320
	GCCAAATTTA ATTGCACCTT GGAGTGAATG ATCATAGCCC AAAACAGTAA TATCAGTACC	1380
20	GTGTAGCGTT GTCATAATTT TTATATCTTT ACCTGACATC TCACGAGCTA AAATCCCACA	1440
	AATTGCATGA GGTACAGCAT AGTGCATATG CAACAAATCA AGATCATATT CTTTAATAAC	1500
25	TTCAGCGATT TTAGTACTTA ACGTAATATC ATACGGTGGA TACTGAAATA CTGCATATTG	1560
	ATTCACCTCA ACTTGATGAA AAATCATATT CGGTAATGGT TTTCTTATTC TAAACGGGAT	1620
	ATTTGAAGTG ATAAAATGTA cTTTCGTGACC TCGCTCTGCT AATTTAATTC CTAATTCTGT	1680
30	GGCAATAATT CCAGAACCAC CCATGGACGG GTAACATGTT ATACCTATCh TCATTCGCTT	1740
	GCCCCATCCTT TCTTTCTATT TCTChCTATG ATnCTCGATG CGTAGA	1786

(2) INFORMATION FOR SEQ ID NO: 619:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 844 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 619:

45	ACAGGTATGG ACTTnGCTCA AATGACACGA CATTATTTAT CAAGACCTAT TGCTATAATC	60
	TTTTGGATCA TTGCAGAACT AGCAATTATC GCTACAGATA TTGCTGAGGT TATTGGTAGT	120
	GCTATTGCTC TTAATCTCCT ATTTAACATA CCTTTAATCG TCGGTGCACT AATAACTGTA	180
50	CTTGATGTAT TTTTACTACT TTTTATAATG AAATATGGTT TTAGAAAAAT TGAAGCTATT	240
	GTTGGTACAT TAATTTTCAC AGTGTTATTC ATCTTTATAT TTGAAGTCTA TATTTTCATCA	300
55	CCACAGTTGA ATGCTGTGTT AAATGGATTT ATACCACATA GTGAAATCAT TACAAATAAC	360

TTACATTCAT CAATTGTACA ATCTAGAACA TACTCAAGAC ATAACAATGA AGAAAAAGCG 480
 CAAGGatTAA ATTTGCTACG ATAGATTCGA ACATTCAGTT ATCAATCGCA TTTGTAGTCA 540
 5 ATTGCTTATT ATTAGTgTA GGAGCATCAC TATTTTkCAA CTCAAATGCT GACGATTTAG 600
 GTGGTTTCTA TGATTTATAT CACGCCTTAA AACTGAACC TGTACTAGGT GCAACAATGG 660
 GTGCAATCAT GAGTACATTA TTTGCAGTTG CATTATTAGC GTCAGGTCAA AATTCAACGA 720
 10 TTAAGGTTAC TTTAGCAGGA CAAATTGTAA TGGAAGGATT TTTAAGATTA CACATACCAA 780
 ATTGGTTAAG ACGTTTAATT ACACGTTCTC TTGCTGTCAT TCCTGTTATC GTATGCTTAA 840
 15 TCAT 844

(2) INFORMATION FOR SEQ ID NO: 620:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 574 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 620:

TGTATTGCAG TCATGCCATA AATTTTTTTGA ATAATAAACG GAGACGCAGA AATATAAGTA 60
 AATAATATTA CAAATGTCAT ACCTTGGAAT GAGCATTGGT AATACAAAAC GTGGCGTCTT 120
 30 CAnTAATATT TTGAAGTTTT TAAACATTGT CTTTAaTCCA CTACTTGACT CACGATTTGT 180
 CACTGTTAAT GATTCAGGTA CTTTAAATAA AGAACCTATG ACCATGACGA AGCCAAAGAT 240
 35 AGTCAGAATG ACAAAGACCA TACGCCAGAC AGAATAATTT AAAATTATGC CCCCTATTGT 300
 TGGCGCAACA ACTGGTGCAA TACCATTAAC AAGCATCAAT AATGCCATAA ACTTAGTTAG 360
 TTCATTACCA CTATACATAT CACTTGCTAT AGCTCTTGAA ATAAGTGTG tGCGCCACCT 420
 40 GTCACCTCCTT GAAGaAATCT TAATGCAACC ATCAGCCAAA TATTATGTAC AAAAACAATA 480
 CCTAACTTG CTAATGTAAA AATAATCATA GCTATAATAA GCGGCTTTCT GCGCCCAGTT 540
 45 GAATCTGAAA TTGGACnAGC AACCAAATTA CCAA 574

(2) INFORMATION FOR SEQ ID NO: 621:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 523 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

AAGCAAGAGA GAGTACAACA TTTATATGAT ATTAAAGACT TACATCGATA CTACTCATCA 60
 GAAAGTTTTG AATTCAGTAA TATTAGTGGT AAGGTTGAAA ATTATAACGG TTCTAACGTT 120
 5 GTACGCTTTA ACCAAGAAAA TCAAAATCAC CAATTATTCT TATTAGGTAA AGATAAAGAG 180
 AAATATAAAG AAGGCATTGA AGGCAAAGAT GTCTTTGTGG TAAAAGAATT AATTGATCCA 240
 10 AACGGTAGAT TATCTACTGT TGGTGGTGTG ACTAAGAAAA ATAACAAATC TTCTGAAACT 300
 AATACACATT TATTTGTAA TAAAGTGTAT GGCGGAAATT TAGATGCATC AATTGACTCA 360
 TTTTCAATTA ATAAAGAAGA AGTTTCACTG AAAGAAGTTG aTTTCAAAAT TAGACAACAT 420
 15 TTAGTTAAAA ATTATGGTTT ATATAAAGGT ACGACTAAAT ACGGTAAGaT CACTATCAAT 480
 TTGAAAGATG GAGAAAAGCA AGAAATTGAT TTAGGTGATA AAT 523

(2) INFORMATION FOR SEQ ID NO: 622:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1871 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 25 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 622:

30 AGAAGTGTGA nAAAAATTTA AnAGAGATAT GCACATAGAT GACGCATTGC TATATCCAAG 60
 CAATTGAGAA AGCTGCTGAT GCTCCAAATC aCGGAATGAG GGAACCATGG AGAGTTGTGC 120
 ATGTTCCGAA AGACAGATTA GGAGATATGA GTAAGGATAT TTCTAAATTT GCATTTCTTA 180
 35 ATGAATTAGA TAAGCAACAA TGTCATTATG ATGCAGTTAC GAAACTAGGT GGCATGTTAT 240
 TGCTTATTTT AAAACAGAT CCAAGACAAC GTCAAAATGA TGAAACTAC TTTGCATTTG 300
 40 tGCATATGCA CAAAATCTTA TGTTGTTACT TTATGAAGCG GGAATAGGTA CATGTTGGAA 360
 aTCGCCATTA TATATCTATG ATCCTAAAGT AAGnAAACAC TTGGTATAAA GnAAGATGAA 420
 GTTCTTGCTG GATTCTTATA TTAAACGGAT TTAGAAGnAG ATATGCCTAA AGCACCACGT 480
 45 AAAAATAGAA ACTTAATTAC ATTATATTAA TATGTATAAT TATAGAAACA TTAATAAAAG 540
 CTGAGTCATG AATTGATGGA CATCTATCGA GTTAGAGATT TAATCTAACT TACTAGAGTC 600
 GGTACAATAA CAGTCTCAGC TTTTATTGT GCAGTATATA CACATTTTTTA TTTTAGTATT 660
 50 TATTtAAAAG TTtCTGCTaA AAATGATTCA ACTTGTTTCA GTGACTTAGC ATTTGCTGAA 720
 TGAAGGTGTG CAATTTTATC GCCGTTTTTA AATACTAGCA AGCTAGGGAT ACCCATAACT 780
 55 TCATTTTCAA CAACTACATC TTCTAATTCA TCACGATTAA CAGTATACCA TTGGTAATCA 840

CCTGCCTCAA ATTTAACAAT TACAGGTGTA TCGCTATTAA TTACAGATTT AAATGATTCA 960
 TTACTTTTGA TTGATTGCAT TGTAACAACT CCTCTAGATA GTTTAATAAT TTTTATTATA 1020
 5 GCTAAATTTA TATCATAATA AAAAATTTTA GCTTCAAAAT GAAAGCCTTT TGCTTTGGAA 1080
 AATGATATAT TTATTTTAAA TACATAAAGG AGGTTGCAGT CGTATGATTA AATTTTACCA 1140
 10 ATATAAGAAT TGTACAACCT GTAAAAAGGC AGCAAAGTTT TTAGATGAAT aTGGCGTAAG 1200
 TTATGAACCA ATTGATATCG TTCAACATAC ACCTACAATA AATGAATTTA AAACAATAAT 1260
 TGCAAATACA GGCGTAGAAA TTAATAAATT GTTTAATACA CACGGCGCGA AATATCGTGA 1320
 15 GCTTGATTTG AAAAATAAAT TACAACTTT ATCAGATGAT GAAAAGTTAG AGTTGTTATC 1380
 ATCTGATGGT ATGTTAGTAA AGCGTCCTCT AGCAGTAATG GGCGATAAGA TAACATTAGG 1440
 ATTTAAAGAA GATCAATATA AAGAGACTTG GTTAGCGTAA GTGaAATGTA AGCGTTTACT 1500
 20 AAATATCTCG ATATTTAGAT TCATTACATG TAAAATGAAA TAAGCTATAC AATTGTTAAT 1560
 TTTTATAAAT ATAGTTGAAT AGCATCTAGC CTTATGGCAT CATTAAATGAT GTAAAGATTA 1620
 25 ATTAGGAGGG GATTCTCTTG GCAGTACCAA ATGAaTGAA ATATTCAAAA GAGCATGAAT 1680
 GGGTTAAAGT TGAAGGTAAT GTAGCAATAA TTGGAATCAC AGAATACGCA CAAAGCGAGT 1740
 TAGGTGATAT TGTTTTCGTT GAATTACCAG AAACAGATGA TGAAATTAAT GAAGGGGATA 1800
 30 CGTTTGGTAG CGTAGAATCA GTTAAAACTG TATCAGAATT ATATGCACCA ATCTCTGGTA 1860
 AAGTAGTTnA A 1871

(2) INFORMATION FOR SEQ ID NO: 623:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 451 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 623:

45 TTGCTGTAGA AGATAAAGAG TCCCATCAAT GGATAGGCTT TATAGGTTTG AATTATATTC 60
 CAGAAACAAG CGATTATCCA TTAAAGAAT TACCGCTTTA TGAAATAGGT TGGCGCTTGT 120
 TGCCAGAATT TTGGGGAAAA GGATTAGCAA CTGAAGGCGC AAAGGCAACA TTGAAGTTAG 180
 50 CAGAAGAACA TCAATATAC GATGTCTATA GTTTTACAGC AGAAGCAAAT AAAGCTTCAC 240
 AACGTGTAAT GGAAAAAATT GGCATGACAG TGTATGATCA TTTCGAATTA CCCAATCTAA 300
 55 GTAAGTATCA TTTATTaAAA AGGcAAGTGC GCTATTACAT TAATCTTCcG AAAGTGGA 360

ATTAgGGGGT GtTnGtKtN ATTTTTTTAA n

451

(2) INFORMATION FOR SEQ ID NO: 624:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 665 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 624:

15 CGATAGTTAT CTAAAGCCAT TTTnGATTGT GTTATGAAAT CTAATGATGC GTGATAATTT 60
 AATGCrACAT AACGrTaATA TAAAATATCA ATAGTGAACA TTTGAGCAAA TAATGAAGTT 120
 GTTGCTCCCA TATGCATCTC ATTTTCATCA GTTTTCCCAT AAGTTAAAAC AATATTTGAT 180
 20 GCCTGTGCTA CGGGATTATC CCTTGTAATA GTAATTGTAA TTATAGGTAT ATGGTAGTCA 240
 TCAATAACTT TAACCATTGA TTGCATTTCA CTTTGCGTAC CATTGTTAGT AATAAGAATA 300
 aCACTGTCGT TCGAATTGTG AGTTGCTAAT AATGTAGCAA AAATATGTGT TTCTTGAACA 360
 25 AGTTGAATAT TAAGACCTAT TCTTGATAAC TTTTGGTATA AGTCGGTAGC AACTACAAAA 420
 GATGCGCCAA AACCATATAT AAAAATCGTC TCAGAACGTT TTAAACAATG ACATATTTGA 480
 30 TCAATAGTTT TATCATTTAA TTCGTTATTT GCATGATTAA GTGCGCGTGT AGTACGTGTA 540
 TGGAGTTTAG TTCTTAAAGA TTCTGTGCTT TCGTTATTCA TTAATTCAAC ATTGTAAATT 600
 GATGATGCTT TAGGAACATA TTTAGATATA TTTATTTTCA AGTCGTGAAA ACCGCCATCA 660
 35 GTAAT 665

(2) INFORMATION FOR SEQ ID NO: 625:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 2549 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 625:

GATGCCAATT AACCGTGCAT ATAATGTTGA GAAGTTAATC GAAGCAATTC AATATTATCA 60
 50 AGAAAAACA AATCGTCGTG TTACTTTTGA ATATGGTCTG TTTGGTGGTG TGAATGACCA 120
 ACTAGAACAT GCAAGAGAAT TAGCACATTT AwTAAAAGGC TTAAACTGCC ATGTTAACCT 180
 AATTCctGTC AACCATGTTT CAGAAAGAAA TTATGTGAAA ACGGCTAAAA ATGATATCTT 240

	TTCGGATATT GACGCAGCTT GTGGTCAATT AAGAGCAAAG GAACGACAAG TAGAAACGAG	360
	GTAAAGACAA ATGCTAGAGG CACAATTTTT TACTGATACT GGACAACATA GAGATAAGAA	420
5	TGAAGATGCG GGTGGTATTT TTTATAATCA AACTAATCAA CAACTTTTAG TTCTGTGTGA	480
	TGGTATGGGT GGCCATAAAG CAGGAGAAGT TGCAAGTAAA TTTGTTACAG ATGAGTTGAA	540
	ATCyCGTTTT GAAGCGGAAA ATCTTATAGA ACAACATCAA GCTGAAAATT GGTGCGTAA	600
10	TAATATAAAA GATATAAATT TTCAGTTATA TCACTATGCA CAAGAAAATG CAGAATATAA	660
	AGGTATGGGT ACAACATGTG TTTGTGCACT TGTTTTTGAA AAATCAGTTG TGATAGCAAA	720
15	TGTCGGTGAT TCTAGAGCCT ATGTTATTAA TAGTCGACAA ATTGAACAAA TTACTAGTGA	780
	TCACTCATTG GTTAATCATC TTGTTTTAAC GGGTCAAATT ACGCCGGAAG AAGCATTTAC	840
	ACATCCACAA CGTAATATTA TTACGAAGGT GATGGGCACA GATAAACGTG TGAGTCCAGA	900
20	TTTGTATTAT AAGCGATTAA ATTTTTATGA TTATTTATTA TTAAATTCAG ATGGATTAAAC	960
	TGATTATGTT AAAGACAATG AAATTAAGCG TTTGTTAGTA AAAGAAGGTA CAATAGAAGA	1020
	TCATGGTGAT CAATTAATGC AATTGGCATT AGATAACCAT TCGAAAGATA ACGTTACTTT	1080
25	CATACTCGCG GCTATTGAAG GTGATAAAGT ATGATAGGTA AAATAATAAA TGAACGATAT	1140
	AAAATTGTAG ATAAGCTTGG CGGCGGTGGC ATGAGTACCG TTTATCTTGC TGAAGATACG	1200
30	ATACTTAACA TTAAAGTTGC AATTAAGGCG ATTTTTATAC CACCTAGAGA AAAAGAAGAA	1260
	ACATTAAAAC GTTTTGAACG AGAAGTACAT AACTCATCAC AGCTATCACA TCAAAATATA	1320
	GTAAGTATGA TCGATGTTGA TGAAGAAGAT GACTGTTACT ACTTAGTAAT GGAATATATC	1380
35	GAAGGTCCGA CTTTGTCTGA GTATATTGAA AGTCATGGGC CATTAAAGTG TGACACAGCG	1440
	ATTAATTTTA CGAATCAAAT ATTGGATGGC ATTAAACATG CGCATGATAT GCGTATTGTA	1500
	CATAGAGATA TTAAGCCACA AAATATATTA ATTGACAGCA ATAAAACGTT GAAAATATTT	1560
40	GATTTTGGAA TTGCTAAAGC TTTAAGTGAG ACGTCTTTAA CTCAGACTAA TCATGTGTTA	1620
	GGTACTGTGC AGTACTTTTC GCCAGAACAA GCAAAAGGTG AGGCAACGGA TGAATGTACA	1680
	GATATTTATT CTATAGGTAT kGTGTTATAT GAAaTGCTTG TTGGTGAACC ACCCTTTAAT	1740
45	GGAGAAACTG CAGTTAGCAT TGCGATTAAA CATATTCAGG ATTCTGTGCC AAATGTGACA	1800
	ACAGATGTAC GTAAGGATAT TCCGCAATCT TTAAGTAATG TCATTTTACG CGCTACAGAA	1860
50	AAAGACnAAG CGAATCGTTA CAAAACAATT CAAGAAATGA AAGATGATTT GAGTAGTGTT	1920
	TTACATGAAA ATCGAGCGAA TGAAGATGTC TATGAACTCG ATAAAATGAA AACGATAGCG	1980
	GTACCTTTGA AAAAAGAAGA TCTAGCAAAG CATATTAGTG AACATAAGTC GAATCAACCT	2040

	AGCCAGAAGG TACGGTGTAC GAACCAAAAC CTAAAAAGAA ATCAACACGA AAGATTGTGC	2160
	TCTTATCACT AATCTTTTCG TTGTTAATGA TTGCACTTGT TTCTTTTGTG GCAATGGCAA	2220
5	TGTTTGGTAA TAAATACGAA GAGaCACCTG ATGTAATCGG GAAATCTGTA AAAGAAGCAG	2280
	AGCAAATATT CAATAAAAAC AACCTGAAAT TGGGTAAAAT TTCTAGAAGT TATAGTGATA	2340
	AATATCCTGA AAATGAAATT ATTAAGACAA CTCCTAATAC TGGTGAACGT GTTGAACGTG	2400
10	GTGACAGTGT TGATGTTGTT ATATCAAAGG GCCCTGAAAA GGTTAAAATG CCAAATGTCA	2460
	TTGGTTTACC TAAGGAGGAA GCCTTGCAGA AATTAAAAATC GTTAGGTCTT AAAGATGTTA	2520
15	CGATTGAAAA AGTATATAAT AATCAAGCG	2549

(2) INFORMATION FOR SEQ ID NO: 626:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 2286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 626:

	TGCTTACTTC GCCTTCAATA CGTACTAATT CATGTCCACA ACTTGGACAA TGGGTTGGCA	60
	TATGATATGT GACAGCATCC TCAGGTCTAC GTTCTGGAAT ACTACGTACA ACTTCAGGTA	120
30	TGATGTCACC TGCTTTTTTC ACTACAACAC TATCACCAAT TCGAATATCT CTGTCATGAA	180
	TTAAATCCTC ATTGTGCAAA GATGCTCTTG aTACAGTTGT ACCAGCTACT TTTACTGGTT	240
35	CTAAAATAGC AGTAGGTGTG ACTACACCTG TTCGTCCAAT ACTTAATTCA ATATCTAATA	300
	ATTTAGTTAC TACTTCCTCA GCTGGAAATT TATAAGCAAT GGCCCATCTA GGAGATTTTT	360
	GTGTGAATCC CATCTCATCC TGTTGATCTA AATCATTAAC CTTAATAACA ATCCCATCAA	420
40	TATCATAAGG TAATGACTCT CTTTGGCTTG TCCATTTTTTC AATATACTCT AAAACACCAT	480
	CGATATTATT TACACGCGCT CTATTTTTAT TCGTTGTAAA ACCTAATTTA TCTAACTCAT	540
	CTAATGCTTC ACTTTGCGAA CGCGCATTGA AATCAGTGAA ATCATTGACA CTATATATAA	600
45	ATACGCTTAG CTTTCGTTTT GCCGTTAATT TAGAATCTAA CTGTCTTAAT GATCCCGCAG	660
	CAGCGTTTCT TGGATTnGCA AATAACTGCT CATCATTTTT TTCTTTTTCT TCATTTAATC	720
50	GTAAAAATGA ACGTCTCGGC ATATATGCTT CACCACGAAC TTCTACATTT AATGGtTCTT	780
	TCATTTTCAA AGGTATCGCA TGAATTGTTT TTaAATTTTC GGTAATATCT TCACCTGTTG	840
	TTCCATCACC ACGTGTTAAA CCTTGaACGA AGTATCCATC AACATATTTT AATGATACTG	900

GTTGGTCGAA TTTTCTCAAA TCATCCTCAT TAAATGCATT CCCTAAACTT AACATTGGCG 1020
 TGTCAATGGTT GACTTTATTG AAAGAGGCTT GGGCTTCACC GCCAACTCTA ACTGTTGGAG 1080
 5 AATCTACAGT CTTATACTCA GGATGCTCCT CTTCTATTTT AATCAGTTCA TGAAGTAATT 1140
 TGTCAATATTC ACTATCTGGT ACAGATGGAT TATCCTCTAC ATAGTATTCA TAACTGTATT 1200
 GATTTAATAA ATCATGTAAC TCGTTCACAC GAGACGATAA ATCAGCCATC CCTTAATCCT 1260
 10 CCTTTTTTtC AATTGGTGCA AATTGCGCTA ACAAACGTTT TGGCCCTTGT GATTTAAAGA 1320
 TAATATCTAG TTCGATTGAG CCATTTTTCT CGTTTACATT ACTCACCATG CCTTCTCCCC 1380
 15 AGGCTTTATG CATCACTTTG TCACCTACAT TCCAATCAGA TGACAATACT TGTTTTTTTCG 1440
 TTGACGTTGT TCGTTGACTA AATCCGCGTT TAGCAAAAGG TTTTGCCTTA GGTGTATCG 1500
 TTTGTCGTTT GCCACTTGAA TGATTTTCTA ATAGTGATTG TGGAATTTCC TTTAAAAATC 1560
 20 TGGATGGCAT ATTTGACTGA GGGCGACCAA ATAACATTCT TGATGTCGCA TGAGTGATAT 1620
 ATAACACCTC TTCAGCCCTT GTAATTGCTA CATAACAAAT ACGACGTTCT TCTTGCAITT 1680
 CATGATCATC TTCACTCTTA ATCGCTCTAA TATGTGGGAA TAAAGATTCT TCCATCCCCA 1740
 25 TTATAAGAC AATTGGAAAT TCAAGGCCCT TAGCCGAGTG CATCGTCATT AGTGTACGC 1800
 CATTTTCAGT ATCTGCCTCA TCAATATCAG CTACTAACGA TAAATCCGTT AAAAAAGTTAA 1860
 TTAATGACTG TTCTTCTAAT GGGGTATTTT CCTCATAGTC TTTTGGTACT GACATAAATT 1920
 30 CATCGATGTT TTCTAATCTA CTTGAGATT CTAATGTATT TTCACGTTCA AGCATTCTCTC 1980
 GATAGCCAGA CTTTTGTAAT ACTTCATCAA CTATTTCATG AATTTCTAAA AATTCTTGTT 2040
 35 CTTTTATCAA GCTTTGGATT AACTCGTAAA AATTAAGACA CTCTTGTC ACCTTTTTTG 2100
 aCAATCCGAT AAAATCAGCT TCTCCAAGTG CATCAAACAT ACTGATATTG TTTGAAGTG 2160
 CATAGTTTTG AACTTTTTCA ACAGATGAAG GACCTACACC TCTTTTGGGA ACATTaATAA 2220
 40 TACGTTGCAA ACTAATGTCA TCATTACTAT TGGCAATTAT ACGCAAATAA CTTAATAAAT 2280
 CTTTGA 2286

(2) INFORMATION FOR SEQ ID NO: 627:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 627:

TGACATTAAA AGTTGGGTGA AnAAACAAGG CATACTTTAG TTAAGCTTGA TGAAAATAAC 120
 AATGGAATTA ATGCGATTAT TCAAAAAGAA AAAGCAAAAG ATTTAGATAT AAATTATTCT 180
 5 GCTAAAGGTA CTACCAATTG TATTATTTAG TGGAGAATTA GACAAGCTGT AGCAGCGTTG 240
 ATTATTGCCA ATGGTGCTAG AGCTGCTGGA AAAGATGTAA CTACCTCCTT ACTTTTTGGG 300
 GGCTTATGCC nTTAAAAAAG TGCCACCGTT AATGTTAAAA GCAGTTGCCA AAATGTTTGA 360
 10 TThATGTTGC CCCAAAAGAT TTACGATGCC CCTTCCCAA 400

(2) INFORMATION FOR SEQ ID NO: 628:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 453 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 628:

AATAATTTGG GCGCTnTTTG CGTCGGGATA TTATACCGCT TCCTTAATTG TTCAACATTG 60
 25 TAATCACTGT TTTTCAATTG ATATTTTGCA GAGTAAATTG GTAATTCTGG GTTATATGAC 120
 ACTTCGTCCT CTTTATAGTT TTCCAATTCT TTGAAATTCC CGTATTGTAC AAAGAAGTTA 180
 AATTCTTCGA TTTCTTTTTT TACTTTTTTCG TCATCGATTG GTTTTAATGG AATCATTTTA 240
 30 TTakTTTCCA TTTTCACAGG ATATCTTTTT GTATGATTGT GTGTCATTCC ATCGCTATCT 300
 TCAACAACCT CTCTAACAAT ATAATGCCCT TTAGCCGTTT TAGTATTTCT GTTAATTTCT 360
 AAAACTGCTC CTCTrGATT CAGATTTTCT CCTTTTAATT GGATTTTCAT TTCAGATCTA 420
 35 ATTAGcCAAG TACCTTTATC ATCTtTTTTA AAT 453

(2) INFORMATION FOR SEQ ID NO: 629:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1221 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 629:

TCATATGCAT TTGCAAAATA AACGCCAGAA GCAAGGTTTA GAATTGGGCC GTCCGTTTTG 60
 50 CTCAaTTCAC TTGcATTCAA TAATTCATGC TGATCATGAT CAATTTGCTT ATCTAATTCT 120
 GCaATTTTCT TCATTTGCTT ATCTGATTG TTTTCTTTTCG CCATCATTTG ATCACGACGA 180

GCTAATGGTA CTAATACTTT ATCTCCATAT GTGTCAATAA AGTTATAAAA ATAATCATCT 300
 GTTTTGTATA CAAATCCAGC ACGCTCTTCA GTTTCACGAT ATAAATCTAA GAAAAGATTG 360
 5 AACTCATCAC GTTCAAGGAA TCTGACTTTA ACACCATAGT TTATCGCTTT ATTAATATTA 420
 CGTTTACGTT GACTATCAAA TGTCTTTTTT AATGTTTCGG GTGTTTTACC TTCAAGGTTT 480
 10 AATACGCCCCA TCCATCGTAC TTGGCTCGAT GTATCATACT CAGTTGTAAA GCCATGATGC 540
 TCGTAACCAT GTGATTTAAA CAAGTTTACT AGGGCATCAT TTTTCTCGCG ACCTTCAAAT 600
 GGCACGATAT CTTTATCATA TAGATGATAT AACCAATACG GATCTAATTT AACATATAAA 660
 15 CATTGATGTT GCTGTAAATA TTTATCTAAC TCTTTTAAAT AATAATCAAC TAATCCTAAA 720
 TCTGAAAAAT CCATTACTGG ACCACGATTC GAATAGTAAA CATAACTTCC CATAGTAGGA 780
 ATTTTAGAGA AAAGGCTTGC TGCAATTACT TTGTTATTGT CGTCTTTAAT ACCTAATAAA 840
 20 ACTACTTCAA AGCCATCATT CTCACGGGTA ACTATATTTT CTTTACTTGG GAAATAATGA 900
 CTTTCCAATG ATGGATTTTG TACAAAGTTG TCAAATTCGG TAACAGTTAA CTCTGTAAAT 960
 TTCATGTTTT GATAATTCCT TCCTAAAAAA TTCTGTCTTT AACTTTTTTA AGTGCGGTAT 1020
 25 ATGCTGCGTA AACAGGTTTA TTAATTGGTT TAATAAAGTC ACCAACATAT TCmATAATTT 1080
 CAGCATTGTA ACCTTTTTTG AATTAACTA CACCAGCATC TTCAGCATCT TCTGTAAATT 1140
 TrCCACTAAC ACCATAGAAA TTATAACGGT CAATGCATGA TTTAATGCAT AATTAATCAT 1200
 30 TTCCCATTGC ACTGCATAAC T 1221

(2) INFORMATION FOR SEQ ID NO: 630:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1121 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 630:

TGGCCCAAnT AACACAAGTA ATTGCTGCTA ATGGTAACAT CACAAAAAAT GAAATCGTAA 60
 45 CTACAAATGT TAAACCTTGG AATACACCAA CCATTTCTGG TAATCGTTTA CTATAGTATC 120
 TATTGTGAAT CCAAGTAATA ATAGCTGAAA TAATAATACC ACCTAGAATA TTCGTATCCA 180
 50 ATGTGGCAAT ACCTGCAATT GATTTTAAAC CAGGTACATT TTCAACGCCT TTTTCTAAAT 240
 TAGCGCCAAA CGTATGTGGC CATTGTGTTA AAATGGCATT TATAAATGTA TTAAACATTA 300
 AGTAACCCAT CAATGCTGCA AGTGTGTCAT GACCTGGTGC TTTTGTAGCT AAAGAAAGTG 360

TTACTGACCA AAATTTAAAC CAAAACGTAT GTTGATCTGC TAAACTCCCC ATGATTGTAG 480
 GATTTTTTAAA TAATGTGCGA AAGCCAAGCA CTATCCCAAA GAAAGCGAAC ATTAATACCG 540
 5 GTACAATCAT TGCCTACCG AAACGCTTTA TCGCATTCTT CTTCTATTCC CTCCATATCA 600
 TCTTTCCTAA CAATACATCT AATTAGATTG ATTTATAAAT AGATGTCTTA CTATTTAAAT 660
 ATAATATATA GTAAACGCTT ACACACCTAC AACGACATTG ACGTATTTTG AAAGTATTTT 720
 10 GTATAATCAG ATTATCTTTT CATATAGTGA AAATTTTTTC ACGACCTTAT ATATGACATC 780
 GTTGTAATTTG TAATACATTC GTTTTAAACG CATAATCAAA CCTATATCAA TACACAAATA 840
 TATATAATGA CATAACAAGAT TTTAATGTAA TAACGATCTA TTACACATTT ATTTTCAAGG 900
 15 AGGTTGAATA TGTTTTTAGA TGAACACATT AATCGAAACT TTGATAAACT TAATGATAAT 960
 GATTTACATA TCGCTCACTT TATCAATACA CATATAGATG AATGTAAAAA TATGAAAATA 1020
 20 CAAGATTTAG CGCAATTCAC ACATGCCTCG AATGCAACCA TTCACAGATT TACACGCAAA 1080
 TnAGGTTTTG ACGGTnATAG TGGATTTAAA TCGTACCTTA A 1121

(2) INFORMATION FOR SEQ ID NO: 631:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 4005 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 631:

AACCTTCCAT TTTACTTGAT CGATAACATC AGTTCTGCTT TACAAATCTC TTCATTAATA 60
 35 TGCCTCTTAA AACCATGAAA TTTAACATGT TCCGATAAAT GATAATCTTC TACAAGTTGT 120
 CGATATTCTG ACAAACCATT TCCATGTCCA TAAATATTCA ATTGAATATT GGGATGTTTT 180
 40 GTTACTAATT GCTTGATTAC TTCAATTTGA TGTTTAATTT GTTTATTTTC AACGAGGCGA 240
 GCAATTGATA TGATATGATT TTTCTCCTTT TGATTGATGT CAAATTGATA CTTTAAATTT 300
 GCCACGTAGC CAACCGGAAT ATTGATAACT GGTATTTTAT TTTCAATATA TTGTGAAATA 360
 45 TCTTGGCATT GCTTTTCTGT TGATACAACA ATCGCTTTAT AACGTGTTAA ATTATTAAAC 420
 ACTGTTTTAT AAAAATTTT TATACCATTA CCGGCACCGG ATAAATGTGT ACTATGGAGC 480
 ACAACAATAA CTGGAATACT TTGATTTAAT CCCGCTATAA CATTTCTTAA TTCATGAGGA 540
 50 CGATCTAATA TGATTTGATC ATTATTTTTA CATAATTGAT GGAGAAAATA TTGAACTAAT 600
 TCATCTTCTG TATCAAAAAA TTGTTGATGC TGGTCTTCAT TTAAGATAAC CTTTGTGAGC 660

	TAGTAATTTT	CGAGTACAAT	CCGTTGTCCT	TCACCTAAAA	TTCGAGAACA	ACTTAAAAAG	780
	CCTCTTCCAT	CATACAATTC	GCGTTTTACT	TTTCTTCTTT	TATGATCAAA	ATAATTCACA	840
5	TAATTTAATT	GATGATACTG	TTTATCTAAA	AAATGAGCAT	ACATTACAAA	TTGCTCTTCA	900
	TCATATATTC	TGACATCATT	TGAATTTTCC	ACAAATTTCA	ATGTGTACCT	ACATGACTTT	960
10	TCCCAATACT	GTATCCAGTT	AACTTGCTTT	GTCTTTTTAT	AATTGATTGC	TTTTTGAAAA	1020
	TAGTCATACA	TTGTAAATAC	ATCATTTTCA	ATCTGATGTT	GCTTCGCATA	TGTGTATGAA	1080
	TAAGGATTCC	ATTTAACATA	TACACATTTT	GAAGATATGC	CGTGTGTTT	GAACAACTTC	1140
15	AATCTATTTA	TTTGCGCTTT	TTCTACACCT	GTAATTTTAC	TTTCTAAAAAT	TGTTCCCTAAA	1200
	ATGTAATTCA	TATTATCGCC	TCATATAAGT	TTTATTCGGT	ATCTTTATTG	TTTATTTTAT	1260
	ATGAAAAATA	CATCTATTGC	ATGTGTAATT	ATAAAAAAAC	CAGGCCACAA	GGACCTGGGT	1320
20	CATATTGTAT	TATTTGTTTT	GTTTTTTGCG	ACGACCGAAT	AACAATAATG	AACCTAATGC	1380
	TGCAAATAAT	CCACCAAATA	ACGTTGCGTT	ATTTGAGCCG	TTATTTTCAC	TACCTGTTTC	1440
	TGGTAATGCT	TTTGCTTTAT	TGTGATGGTC	TTTAGTAGTA	CTCATTGGTT	TAACAGGTGT	1500
25	ATGTTTTCTT	GCATCCGAGT	CTGAATCGCT	GTCTGAATCA	CTGTCTGAGT	CTGAGTCGCT	1560
	ATCAGAGTCT	GAGTCGCTGT	CCGAATCTGA	GTCGCTATCT	GAGTCTGAGT	CGCTGTCTGA	1620
30	ATCTGAATCA	CTGTCTGAGT	CTGAGTCGCT	ATCTGAGTCT	GAATCGCTGT	CTGAATCTGA	1680
	GTCGCTATCT	GAGTCTGAAT	CGCTGTCTGA	ATCTGAGTCG	CTATCTGAGT	CCGAATCGCT	1740
	ATCTGAATCT	GAGTCGCTGT	CTGAGTCTGA	GTCGCTATCT	GAGTCTGAAT	CGCTGTCTGA	1800
35	GTCCGAATCG	CTATCTGAAT	CTGAGTCGCT	GTCTGAGTCT	GAATCGCTAT	CTGAATCTGA	1860
	GTCGCTATCT	GAGTCTGAAT	CGCTGTCCGA	ATCTGAGTCG	CTATCTGAAT	CTGAGTCGCT	1920
	GTCTGAATCT	GAATCACTGT	CTGAGTCTGA	GTCGCTGTCT	GAGTCTGAGT	CGCTGTCTGA	1980
40	GTCACTATCT	GAGTCTGAAT	CGCTGTCTGA	TGTATCTTCT	TGGAAGTATC	CGTTATCAAG	2040
	TGTGAAATCA	TCATGATCCG	TAATTGTTAC	GTCAACTTCG	CCACCATCTG	CATCTTTATC	2100
45	ATCTTCAGTT	GTATTTGTAA	CTGTTTGTGT	TAAGCCAGCA	GGCTTTTCAA	AAATAACTTT	2160
	GTATTTACCG	CTATCTAAAT	TATCAAAGCA	GTATTTACCA	TTTTCATCTG	TTTTAGTTGT	2220
	TCCAATTACT	TCGCCTTTTT	CATTTAATAA	AGTAACTTTA	ACATCTTTGA	TACCTTTTTTC	2280
50	AGTTGAATCT	TGTTTGCCGT	CTTTATTACT	GTCGTACCAA	ACATAATCAC	CTAAACTATA	2340
	TTTTGGTGTT	TTATAGAAAC	CACTGTCTAA	TGTCATGTTA	TCTGCATCTT	TAATGACACC	2400
55	TGTTGTTGTT	AAACCATTAG	AATCTTTTTTC	AGTATCATTT	CCAGAAGTTA	CTGAAGTTGG	2460

	TTGATATTTA CCATTTTCAT CTGTTGTAAC TGTTTTTAAA ACTTTGTCGT TTTTCATCTTT	2580
	TAACGTAAC TTTACACCTG AAATGCCCTT TTCATCTTTA TCTTGAACAC CGTTTTTTATT	2640
5	TGTATCTTCC CATACATAGT CACCTAAGTT GTAAGTCGGT TTGTAGAAAC CAGAGTCAAT	2700
	AGTATCGTTA TCTTTATCTT TAATGACACC TGTGTGTGAT GTACCATTTG AATCTATAACC	2760
	TTTCATCAGTT CCTGAACCTA CTTGTGTTGG TGTGTAACCT GATGGTGTTT CGAATTCAAC	2820
10	TTTATAAGTT CCATTTTCTA ATCCAGTAAA TTGATATTTA CCATCTTTAT CTGTTTTAGT	2880
	TGTTTTGTAAC ACTTCACCGT TTTTCATTTTT CAATGTAAC TTTACGCCTG AAATACCTTT	2940
15	TTTCAGTTGAA TCCTGCTTAC CATCTTTATT TGTATCTTCC CATAcataat TACCTAAATT	3000
	ATATTTTGGT GTTTTGTAGA ATCCACTATC TAATGTCATG TTATCAGCAC CATTAAATAAC	3060
	ACCTGTTGTT GTTAAACCAT TAGAGTCTTT TTCAATGTCG CTACCAGATG TTAGTGTAGT	3120
20	CGGTGTATAG CCTTCTGGTG TAGTAAATTC AACTTTATAA TTACCATTAT CTAAATCAGT	3180
	AAATTTATAT TTGCCATCAG CGTCTGTTGT AACTGTTTTT AaCagTTACC GTTTTCATCT	3240
	TTTAATGTTA CCGTTACGCC AGATATACCT TTTTCATCTT GGTCTTGGAT ACCATTTTTA	3300
25	TTTGTATCTT CCCAGACATA GTCACCTAAG TTGTATTTAG GTTTGTAAAT ACCTAAGTCT	3360
	GCAGATAAGT TATCTTTGCC ATTAAGTGA ATAAGTGAAG ATAAGCCGTT TGAATCTAAT	3420
	TCTTCGTTAT TACCTTGTGT TGAAGGGGTT ACTTCATAAC CTTTTGGTAA GTTTGAAAAT	3480
30	TCTACACGGT AATCTCCATT AGGTAAGTTT GGAATCAAGT ATGACCCATC TTCTTTAGTA	3540
	ACTGCTTCTC CTACTTTTGT ATTTGTATTA TTATCAAATA CAGTTACAGT TACATTGCCA	3600
35	ACGCCTTTTT CTCCTAATTC TTGAACACCG TTTTATTAG TATCTTCCCA TACGTAGTTA	3660
	CCAATTTTAT ATACTTCTTG ACCAGctCCG CCACTTTGGT TATTAGTAAA TCCTAAAGCA	3720
	TTGCCAGTAG AAACGGATTT ATTACCTGTT GAAGATAAAG TAGCCATTTG AACAAGTGTT	3780
40	GGGCTTTCGC TATTTGTATA TTGGAATTTT GTATTAACCA TTACAACATA AGCAGAATCT	3840
	GCATTTCCAA AATCAATAAC AGCGCTATTG TtGTCGCCAT ATGTAATTTT CTGCAAGTAT	3900
	TGATTTGTTA CATCTGTAAG CTCTTTAGTA TTCACATCGT ATCCTTTATT TAATGTATAA	3960
45	CCTTTAGGAA CTTGATATAT TTTTATATCT GTTACATCTT TATTT	4005

(2) INFORMATION FOR SEQ ID NO: 632:

(i) SEQUENCE CHARACTERISTICS:

- 50 (A) LENGTH: 1440 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 632:

	TATTAGGTTA CTCTAGTTTC CAAAGCGGGA ATTTTAATGT TATTAACAGC AAGGACAGCA	60
5	AAAGCAATAT CGGCGCATTG ATTGAAAATC CAGGAATATA TCCTTTTATG TCTGGATATG	120
	AAAACCTTGAA GTTATTGAAT GAATCAAAAA AACTCAAGA TATCGATAAA ATTGTCTCAC	180
10	AACTTCATAT GGATGAATAC ATTCATAAAA AAGCTAAAAC GTATTCTCTT GGTATGAAAC	240
	AAAAATTAGG AATTGCTATA GCATTTTTTAA ATAAACCTCA ATTCATTATC TTAGATGAAC	300
	CAATGAATGG CTTAGATCCA AAAGCTGTGC GAGATGTACG TGAATTGATT GTCCAAAAAG	360
15	CGCAAGAAGG TGTTACTTTC TTAATTTTGA GTCATATTTT AAGTGAATTA GTTAAAAATCA	420
	CAAACCTCTAT CCTTATTATT AACAAAGGTA AAATTGTTAC AGAAACATCG GAAGAAGAAC	480
	TTAAACAATT TAAAGATAAT GATTTAGAAA ATGTATTACT AGAAATCATA GAAAGGGAGG	540
20	ACCAAGCATA AAATGGGAAC TTTAATTAAA CAAGAATGTT TCAAATTATT TAAAAAGAAA	600
	TCAACTTTTA TCGCACCTAT TGTCTTTTATT CTACTAATGG TTGCTCAAGG TTATATTGCT	660
	ACAAAATACA ATGAAATTTT TACGCCACAG GAATCTTTCA CATCTGCTTA TAATGGTTTTT	720
25	TCATGGTTTG CATTTTTTATT AATTATTCAA GCAAGTACAA TCATTTCAAT GGAATTTTCA	780
	TACGGTACGA TTAAAAATTT ACTCTATCGT GAATATTCAA GAACAACTAT GATTGTTAGC	840
30	AAAATCATCA CATTATTTAT TATTTCTTTA ATTTATTTTG TTATTACAAT TATTGCTTCA	900
	ATTGTTATTG GGTCTTTATT CTTAATGAT TTAAATATAT TTGAAAGTAG CGGTAATCAA	960
	TTATCTTTAT TGAATCAATT ATTATTAGTT AGTTTAGGCA CATTGTGTTG CGTTTGGTTA	1020
35	GTTTTAAGCT TAACGTGCT ATTATCATCT GCAACAAATT CAACGGGAGT AGCCATTGCT	1080
	GTAGGTATTG TTTTTTATTT TGCAAGTTCT ATTTTAGCAG TTATTCAAAC GGCACTTTTA	1140
	GAAAAAATAG ACTGGCTAAA GTGGAATCCT ATTAATATGA TGAATATTAT GCTTCAAACA	1200
40	GTTGAAAAAG GCTTTAGTAA GTCGACAAAA TTAGAACTTC ATGAATTGTT TATTGGTAAT	1260
	ATTGCTTATA TTTCTATTTT CTTAATACTT GTAGTATTTA TTTTCAAGAA GAAAAATATT	1320
	TAGTAACTTA AAGTATTAAA TGTCTAAATA CACACATATT CCATCGTAAT TCAAATCAT	1380
45	TTTCAAATCC CTTACCCCAA ATAATGGTGC GGGGATTTTT TCATCCAAAT TTTGGAAATT	1440

(2) INFORMATION FOR SEQ ID NO: 633:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1323 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 633:

	GCTGACATAA TTGCATCAAA TTTACATCC CCATAAAAAT CGCTACCACA TAACCTACGA	60
5	TAATACCTAC AAGAACTGGA ATTAAAGATA GGAATCCTTT AAAAAATCCT TGAACGACTA	120
	TTGTTACAAG CAAGGTTATC ATTGCAACAA TTAAGAACT GATATTGTAA CCTTTCATAT	180
	CTCCAGGATT TTCATACATT GCCATATTGA CTGCAGTAGG CGCTAAGCTT AAACCAATTA	240
10	CCATGATGAC TGGTCCAACA ACAACTGGTG GTAATAATTT CATTAAACCAT GCTGTCCCAC	300
	TTAATTTGAT TAGAATCCCG ATGATGACGT ACATAACACC ACTCATGaAT AATGCTACAA	360
15	GCATGTCTCC TAAGCTATGC GTACTTAATC CCGTGATAAT TGGCGTGATA AATGCAAAGC	420
	TAGATCCCAA GTATGCTGGT ATTTGCGCCT TCGTTATTAA GATATAAAGT AATGTACCGA	480
	TTCCCGAAGC TAGTAACGCT GCTGATATTG GTAGTCCTGT TAAGAATGGT ACTAGTACTG	540
20	TTGCGCCAAA CATCGCAAAT AAATGTTGTA AGCTTAAAAA TGCCCATTGC GCTGGTTGTG	600
	GTTTTTCATT TACATCTAGT ACGGGTTTTA CTGTTCTGTC AAACATTTCA TCATTTTGCA	660
	TAATATTCAT TTCCTCCGAT AATAAAAAAA TCTCTTTACA TCAGTATATG TAAAGAGACA	720
25	AAAAGTGTGA CAAGTTGCTA CAAGTCATTT TCGTCCATAG AAATTGACTT ATAGTTGTCTG	780
	AACATGAGGG TATTATTAGA TAAACAAGCA TATGAAAAC TATTTATCAT TCAACTCCCC	840
	CACCTTTTTT AGTCTCTCGT ACTGAATTAA AAGGGGtATT ATTTAATTAT AACTGCATTT	900
30	CTTTGATCca TTtCTTCyAA ATAGACACTT ACCGTTTCCT CTTTAGAAGT AGGTAWATTT	960
	TTACCAACAA AATCTGCTCG AATTGGTAAC TCACGATGTC CTCGATCAAC CAAAGCAGCT	1020
35	AAACCAATTT TAATAGGTCT AGCATTTAGC AAAATAGCAT CAAGTGAAGC ACGAACCGTT	1080
	CGACCAGTAT ACAGCACATC GTCAATAATG ATGACTACTT TATCTGTAAT ATCTGTGTCTG	1140
	ATGTCTATTG CGTCTTTTGT CGTAAGTGAT GACATGTGcT CTATATCATC TCTAAAGTAT	1200
40	GTAATATCAA TTGTTCCAGT AGGTATACGT TGTGTCTCAA TTTGATGAAT TTtATCTTGT	1260
	ATACGATTCT CTAAATATTC ACCTCTTGTh TTGATACCTA AAAGATTAAA TTATCAGTAC	1320
	CTT	1323

(2) INFORMATION FOR SEQ ID NO: 634:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 761 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

ACCCATCTCA TCGTATTTTG AATTTAATAG ACGAGATCGA TGTATATCTG AATTCATCCC 60
 AACTATGGAT TAATGTTGGT ACATCATtAA cGCATAACCA ACATTTTGAG CAGTTGTTTT 120
 5 ATAAGTAACG TGATTTTTTAT CTAATTGCCC TCTTAATGCG TCCTCTGTAA ATTCAACACT 180
 ATCAGAACCA TTAGAGGTCG CTTCATATAA GTTATTAGAT GCAATATGTG CTAAATCGCT 240
 ATTGATTTTC AATGGTTTTA ATCCTTTTAA TTTTCTCATT TCATTCGTTA CTTCATAAAG 300
 10 AGAAATTAAT TGATTTGGAT TTTGCTCAAC TGGACGCTTA TTATGCTCTT CTGACGTAGA 360
 ATTAGAATTT AATTGATAAG GTTCAATATC TGCTAACATT TCTTTTGTTA AAAATCGTAC 420
 ACTTAGCACC TTTTTCGATT GTTGATCAGA ATACACTTGT GCATATATGT CGCCATATTT 480
 15 AATCaGTGTT TGTGTTTTTA AATCTTCATC TGAAAGTTCA AATTCATATT TTTTACCATC 540
 AACTTTAAAG GACGGTTCTG GATTAATACT TGTATGATTA AAAATTTCTG CAGAATGTTG 600
 20 TCCTATTTTT AACGGACTAA CATTGACTTT CTCACCTGTA GCATACACTG AAACGATTTT 660
 TTCACGTTTA GTTGAAACAA TGTAATAACT GTTTTTGTCT TTAAACACAT AATTTTTGTA 720
 rCCATCTCTA AAAGGGTAGA CrCGATCTGC TTGTCCAAAT T 761

(2) INFORMATION FOR SEQ ID NO: 635:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 827 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 635:

nTAAATATAT TTATATATTA TAGAATAGAA AGACCTGAAG ATTGAATATC TTTCGCAAAG 60
 CCTTTAACTG TATCTACTGA TAATTCGTTA ATATCGCGAC CTAAGTTTGT ATTCACTTTT 120
 40 TTCACAACAT CTGCTGGGCA TGTAATAATA TCTGCACCAA TTTCATCAGC TTGAATCACA 180
 TTGAATAATT CGCGGCAACT TGCCCATAAAT AATTTAACGC CGTCTTTACT ATGCGTAACT 240
 TTnACAGCCT CTkTCATTAA TGGTaATGGA TCTACGCCTG TAtCTGCAAT ACGTCCTGCA 300
 45 AATACTGAAA CATATGTTGG CACACCTTCA GTTACTGCTT CAGTTATTTT TTTAACTTGT 360
 TCAATTGTGT AAACAGCCGT AACGTTTAAT CTCACATTGT CAGCTGAAAG TTTTTTAATT 420
 AAAGGAATCG TTGATTCACC TTTTGTATTT ACAATAGGAA TTTTAACAAA TACATTTTCG 480
 50 CCATATTGTT TTAAAATTGC TGCTTCTTTk TCCATAGTTT CTAAATCGTC TGCAAATACT 540
 TCAAATGArA TTGAAGCATC TGGAATTTCT TTCACAGCTT CTTCAGCAAA AGCTTTGTAA 600

TTTTTATAAG CTGCTTTCAT TnCTTCAATA TCTGCACCGk CCGCAAATAC TTCTACATTT 720
 AGTTTAGCCA TATAAyATAG CCTCCTTGAT TCTTATTAAA ATTTTAACAA CATCTGCATG 780
 5 kCTTTTTCTT ACAACCATTT GTAAAAAATG ATTTTTATTT CTTtGTT 827

(2) INFORMATION FOR SEQ ID NO: 636:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1478 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 636:

TTAGTCGGTA TAACCATCGG CTAGGTGGTT TTTGTATTAA AAAAGTGGAT aCCAAAATTT 60
 20 ATTAATAATT ATTTTAATGT TAGAAAAAAA CTAAATAAAA ACTCGCTAAT GATATCCAAT 120
 AATATGTATA CAAAACGAGA CATATATTGC ATATGATTAA CGAGATACTG AAAATATTTT 180
 ATCACCCTTA AAATGATTAT TCATTTTCAG CGGTAATTCG ACCTAAAGTC AAACCTACAA 240
 25 TAAAACCGAT GATAAATACT ACTAATGAAA CGAACCACAT CACGATATTA GTTGGTAAAC 300
 CTGGAAATAC TGCAAAGAGG GAGCCAACAA CAAAACCAAT GATTAATGCA AAAGTCATTA 360
 GTTTATGATG TGTTAGGAAA TACTGGATAA TTTTGCTTGA AATAATGAAT CCAGCAAGCA 420
 30 CGCCAAATCC GACTGCAAGT AATATAGGAA GACCTGCAAA GTTAAGTTTA ACAACTTCAG 480
 ATATTGCTAG CATGACCGTA CCATAGACGC CAAATACTAA TAACATAAAT GACCCTGAAA 540
 35 TACCTGGGAG TAACATAGCA CTAGATGCAC ACATACCTGC AATAAAATAT TTAATAATAA 600
 GACTAGTTGA TAGAGTAAGT GTTCTCCAG CATGTTTATC ACCATTATTC ATTAATGTAA 660
 TAACAATTAA GATAGCGATA CCAGCTATAA CCATCATGTA ATGTYTAGTT GTAAATGACG 720
 40 TTTTATAGTT AGAAATTTTC AATAAATATG GAACGATACC AATGATTAAT CCACCAAAGA 780
 AAAACATAGT TGGAATATGG TGTGGCTTA ATAAATAATT AAAAAGATTA CTTAGTGATC 840
 CCATTGCCAG TAACATTCCA ATTATAATGG GGATTAAAAA TGTAACCTT GGCCAAAAAC 900
 45 GTCGTGAGAA TATGCCGCTA ATTGAAGCGA TAAATTGATT GTAAATACCT AACAATAATG 960
 CGATAGTCCC ACCGCTAACA CCAGGTACCA AGTCACTCGT TCCCATAGCA AAACCTTTTA 1020
 GAATATTAAT CCATTTAAAT TGTTGCATGA ATAACCTCTT TCAAACGATT GGAATAAAAT 1080
 50 CATAAATAGC ATCATACCAT ATTACAAATG TCCTAGTGAA ATGATAACAT ATTTTAAATT 1140
 CATAAAATCC ATTGAGAAAT TATGTGCACT TATTATCATT TATATTTTTA AAGAGAGCGG 1200

AGGTATAAGT AAGTTATAAT TAACTGAACG CATTATTACA AAGTCTTTTT GACTACAAAT 1320
TAAAAATTATT ATAAACTAGT TAAGAAAAC TATATTTTA CGGAGGGAAT ATAAATGGC 1380
5 ATCAACATTA GAAATyAAAG ACCTACATGT GTCTATTGAG GATAAAGAAA TCTTAAAAGG 1440
TGTTAACTTG ACAATTAACA CTGATGAAAT ACATGCGA 1478

(2) INFORMATION FOR SEQ ID NO: 637:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1995 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 637:

20 ATTACAGCAT CTTCTCTAGG TAGATTATTA AAAGATAGAG GTCTAAATGT AACAAATCAA 60
AAATTCGATC CATACTTAAA TGTGACCCA GGTACAATGA GTCCTTATCA ACATGGTGAA 120
GTATTCGTAA nGGATGATGG TGCAGAAACT GACCTAGACT TAGGACATTA CGAAAGATTT 180
25 ATTGATATTA ATTTAAACAA GTTTTCAAAT GTGACAGCCG GTAAAGTGTA TTCACACGTA 240
TTGAAAAAAG AACGTCGTGG TGATTACTTA GGC GGAACAG TTCAAGTTAT TCCGCATATT 300
ACAAATGAAA TTAAAGAACG TTTATTACTT GCAGGGGAAA GTACGAATGC AGACGTTGTT 360
30 ATCACTGAAA TTGGCGGTAC AACAGGTGAT ATTGAGTCAT TACCGTTTAT TGAAGCGATT 420
CGTCAAATTC GTAGCGATTT AGGTAGAGAA AATGTTATGT ATGTTCACTG TACATTACTG 480
35 CCTTATATTA AAGCTGCTGG AGAAATGAAA ACGAAGCCAA CACAACATAG TGTTAAAGAA 540
TTACGAGGCT TAGGTATTCA ACCAGACTTA ATCGTTGTAA GAACTGAATA TGAAATGACA 600
CAAGATTTAA AAGATAAAAT TGCATTATTC TGTGACATTA ATAAAGAAAG TGTTATTGAA 660
40 TGTCGTGATG CAGACTCTTT ATACGAAATT CCATTACAAT TAAGCCAACA AAATATGGAT 720
GATATCGTTA TTAAACGTTT ACAATTAAAC GCGAAATATG AAACACAGCT TGATGAATGG 780
AAACAGTTGT TAGATATCGT TAATAATTTA GATGGTAAAA TTACAATTGG TTTAGTAGGT 840
45 AAATATGTTA GCTTACAAGA TGCATATTTA TCAGTTGTTG AATCATTGAA ACATGCTGGA 900
TATCCTTTTG CCAAAGATAT TGACATTAGA TGGATTGATT CAAGTGAAGT AACAGATGAA 960
AATGCAGCCG AATACCTTGC AGATGTCGAC GGTATTTTAG TACCAGGTGG ATTTGGTTTC 1020
50 CGTGCAAGTG AAGGTAAAAT TAGTGCAATT AAGTATGCTA GAGAAAACAA TGTACCATTC 1080
TTTGGTATTT GTTTAGGAAT GCAACTTGCA ACAGTTGAAT TTTCAAGAAA CGTATTAGGC 1140

TTACCAGAAC AAAAAGATAT CGAAGATTTA GGTGGTACAT TACGCTTAGG CTTATATTCA 1260
 TGTTC AATTA AAGAAGGCAC ATTGGCACAA GATGTTTATG GTAAAGCGGA AATTGAAGAA 1320
 5 AGACATCGTC ATCGTTATGA ATTTAATAAT GACTATAGAG AACAAATTAGA AGCAAATGGT 1380
 ATGGTGATTT CTGGTACAAG tCCAGATGGA CGTTTAGTAG AAATGGTAGA GATTCCGACA 1440
 AATGtTTCTT TATTGCTTGT CAATTCCACC CAGAATTCTT ATCTAGACCA AATCGTCCGC 1500
 10 ACCCGATTTT TAAATCATTT ATTGAAGCTT CATTAAAATA TCAACAAAAT AAATAAATTT 1560
 GCTAATAAAA CCGGTACTTT CATTGTTAAA CATTGAAAGT ACCGGTTTnT CGTATAATTT 1620
 15 TAATATTATG TTAGTGACAA GGTATGAAAT AACAAATAGT ACTTTTATAA TTCTAAGTCT 1680
 CTTGTCATTT CAATCATTTG TGTATAAATG TCATAGTATA CATAATTCAA TGCCATCGCA 1740
 TGTGGTyGGA CAATCTTATC GTAATCTTCA GTGTAGACTA TAGGTcTTGG TGTAGATAAA 1800
 20 TCGATAAAAT GTACGAGATG ATCAGGGAAA TCATCTGTTT TAGGTTTGTG GCTTATTAAG 1860
 ACCACATCGA TATCTAAGTC GATAAGTTTT TGAATATCTA ATGCAACTTG ATyATTATAA 1920
 AATGGTGCGA ATAATAATAC ACGATCAGTT GAGTCAATTT CTTTAawkTC TTTAATAGCG 1980
 25 TaAGTTTnCG GCTAG 1995

(2) INFORMATION FOR SEQ ID NO: 638:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1107 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 638:

ATTAGTGATG AAAGTCAGAT TGAAGCTTTA TTAACAGCTG AAAAATATTC AGAAATGATT 60
 40 GGTGAATAAT CACCGTGTA CTCCTTAATC TAAGATTGAG GAGTTTATTT TTAGTCTGAG 120
 AAAATAAATG ATATGAAAGA AAAATTATTA GGTACTATTA TTTGGAGTAT TGCTACATTT 180
 TATTATTCAA GAATGATGGA AATAATGAAT TTAGCTATTT TAAAAATAAA AATTGGGGGA 240
 45 AGTTAATATG CTAAACATTC AAGACGTTAn CATnCTTTCT AAAAAGGAGC AAAAAGCATA 300
 TAACCGTTTC GTAGAATCTG TAGAAAACGG TAATTTACCA GTACTACCAT GTATTGAAAT 360
 50 GGATCTAAAA GAGATGCAAG AAGAAACATT AAACCAGAGT AAGATTGGTG GAATGCCATT 420
 TTTAAAATCT TTTAAAGATA TACCATTAGA TGAAAATAAT GTACCAATGG TATTGCTAGC 480
 ACAGATTAAT TTGGATGATC TTCCAGAACA ACAAGAATTA TTTCTGTAA AAGAAGGGAT 540

AAACAATATA AACTCAAGGC TTGTTTATAT AAAAGAGCCA ATTACAGATT TATCACTCGA 660
 AAATATTCAA GCGCATTGGA AGTCATTAGA TGCTGATAAT GAGGATATCC CGTTCAGTGG 720
 5 AGCATTTTCT ATAGAATTTA GATTGTGCGAA ACAAACCTATT ACATGTACTG ATTATAAGTA 780
 CGATGAGGAC GTGCTTGCAT TGTGGAATAA AGTCAATCCA TCCTTCGCGC TAAAAATCAAT 840
 GTTTGGTGGT TATGATGAAT TGATGGAACC TGTGTGTAmC AywTTTACTG CTAAGgAACC 900
 10 ATTTAATCAA CTTGGTGGTT ATCCATATTT TGACCAAATA GATCCAAGAA CGAACGATcA 960
 AGAACTGAAA ATGTATGATA GAGTCTTACT GCAAATTGaT TCTACAAGAG ATGGTAATTC 1020
 15 TTCGATTATa TGGGGTGaTT TAGGTATTGc CAATATCtTA GTGaAAATCTA CTGrACCTTG 1080
 aGGcTatGaa GTTTTGAATG ATTACCT 1107

(2) INFORMATION FOR SEQ ID NO: 639:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 904 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 639:

ATTCATATTA TTATAAATTA TTTCTACACC ATCCCAATTG AGTTGTTTTT CATAATTTAA 60
 ATGTAATTCC ACTAACTCCC TACCAATTTc AACAAATCCA TATACATCCT TTAATATCGG 120
 TATTCGCGGA AAACCTTTAC TCAAATCACT TGAATATTTG TTCACATAAT ATTTATGATG 180
 35 CAAAAATTGCA TATATATAAT ATACTATCTC TTCTGAATTA AGATTTATTT TCTTTTTTAA 240
 AGAATTAGgA AATATTATCT ACArgCCTCA AACTATCTTT ACCTTTGtAT GTAGCAAAGC 300
 CTTkGCCATT ACCAATAAAc TGGAAATTAG GTAATATGTC CGTGATCATA GCCGAGAATT 360
 40 CTTTATTCAT TCCCTGTCCT TGTATATAAA TCACCTGTCC AGTATTCTCC ATTATATTAT 420
 AATATCTACT TGGCATTTC ATAAATTTTT TGTCGTACAC TATCCATTTT TTTGTAAATG 480
 GTCTATGCAT AAATTTAACA ATTCTCTCTG GATTAATTGA AATATTTTTT CCTTTAGAAA 540
 45 ATTTTTGGGT AAGTCCTCGT GTCCAACtaA TaAATGTTTC ATCTTTGTTc ACTAAATTTA 600
 TACGTTCTCT TGAATCTAAG ATATCAATTA ATCTATCTAT TTCAGAATTA TAGTTATCTA 660
 CAAGTAATTT TGcATTTACT AATGCTTTTT CATTCGAAAA ATTTGTTACC CAATTATCTC 720
 50 TTGCTGaATT TACTCCATTA AATkGakCTA AATATATAGA ATTTTCAATA TCCTTGGAAT 780
 CATAATTGG TAAATAATTC CCCATAGTTT ATGTCTCGGT GATTAATCCA ATCATTGGGG 840

AAAG

904

(2) INFORMATION FOR SEQ ID NO: 640:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 436 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 640:

CGATGTCTTT ACTATTAGAC TTAGCCATTG GTTTCACCTC TCCAAAAATT GTAAATGTGT	60
ATCATCAATA TGAAAGTTAC ATAAACTGA CATATTTCTT TAAATATCA ACGCCATTGA	120
TAACTTCCTG TTTTAATTGA TACGCTGTAA CAAAATACTA TAGTTAGTGC TTACATGTAT	180
ATGTTAAAGC AAGCAGTGGT AAATGTAAAT TATAATTATT CATTAACTTT GCAATATATT	240
AAATCTTTTA TTCATAGAAG ATAAATATCA AATCAATCAT AATTATTTGA CAACAAATAG	300
CTAACGATTG TTTTAATCTA CATTTGGCTT ATAGCATTTT AAACCTATAC TCTATTTTGA	360
TACAATATAA GTGTAAATC AATCATAAAA AGGATATTCA ATATCTGCAT CCAAGAAAAA	420
CATTACAATT ACCTTT	436

(2) INFORMATION FOR SEQ ID NO: 641:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 442 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 641:

GTTATTAAAT TCAGAGTGGT AGCAAATTAA AGTTAATCAA GAGTTAAGAT GAATTTAATT	60
CATGAACACG TCTATTATTT TTATAATTGT AGCAAATAAA GCTTTACATC AAGGAGGTAA	120
TTAAATATGT TCAAAAAATA TGA CTCAAAA AATTCAATCG TATTAAAATC TATTCTATCG	180
CTAGGTATCA TCTATGGGGG AACATTTGGA ATATATCCAA AAGCAGACGC GTCAACACAA	240
AATTCCTCAA GTGTACAAGA TAAACAATTA CAAAAGTTG AAGAAGTACC AAATAATTCA	300
GAAAAGCTT TGGTTAAAAA ACTTTACGAT AGATACAGCA AGGATACAAT AAATGGAAAA	360
TCTAATAAAT CTAGGAATTG GGTATTATTCA GAGAGACCTT TAAATGAAAA CCAAGTTCGT	420
ATACATTTAG AAGGAACATA CA	442

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 2472 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 642:

10	CCAATTTTGG TATGAATTAT ACAGATAATT CnGCGCCCGG AGGATCATTT GCTTATTTAA	60
	ATCAATTCGG TGTGGATAAA TGGATGAATG AAGGGTATAT GGCATAAGGA GAACATTTTA	120
15	ACTACTGCCA ATAACGGAAG ATATATTTAT CAAGCTGGAA CTTCATTAGC CACACCTAAA	180
	GTTTCGGGAG CACTAGCTTT AATCATTGAT AAATATCATC TTGAAAAACA TCCAGATAAA	240
	GCGATTGAAT TGTTATATCA GCATGGGACA TCTAAGAATA ATAAACCATT TAGTAGATAT	300
20	GGGCATGGTG AGCTTGATGT GTATAAAGCA TTAAATGTAG CAAATCAAAA AGCAAGTTAA	360
	TAAATCAAAG GAGTTTTTGA TTATGGCAAA ATTAGTTACT GAAAACATTT CGAAGCGGTT	420
	TAAAAATCAA GATGTATTAA AGCATATTAA TATCACTTTA GAAAATAACG AAGTTTATGG	480
25	ATTACTTGGT ATTAATGGAG CCGGTAAAAC GACACTTATG AAAATTATAT GTGGCATACT	540
	TCAACAAGAT TCAGGGGAAA TTAAATTAGA TAATAGACCA ATGACACGAA ATGATTTGCA	600
	CAAAGTTGGT TCGCTTATTG AAACACCTGC GACATATAAT CATTTAAGTG CACAAGATAA	660
30	TTTGAAAATT GTGTGTTTAA ATGAAAGCGT TGATTTCaGC GAAATTAATA GTGTTTTAAG	720
	CTTAGTCAAT TTAAATGTCG ATAAAAAGAA AAAGGTTAAG GACTTTTCTT TAGGTATGAA	780
35	ACAAAGACTT GGAATTGCAA TGGCaTTAAT TAAAAaGCCA GAAATTTTAG TATTAGACGA	840
	ACCATCTAAT GGTTTAGACC CATATGGAAT CCAAGAACTT AGAGAACTTC TAAAATTATT	900
	AACAGAACAA GGTACTAGTA TTATTATTTT AAGTCACATT TTATCTGAAA TCCAAGTTTT	960
40	AGCAGATCAT ATCGGTATTA TTCATGAGGG TGAGCTAAAA TATCAGCAAA GAAATAACAA	1020
	AGATGAAAAC TTAGAAGAGA TATTCTTCAA AATAACGAAA GGTGATTACA AATGATACAT	1080
	TTAAAGATaG AAGGTATCAA ATTTAAAAAt TCTTTCAGTA TGTATGTTTT ATTAATAAGT	1140
45	CcGcTGGTAT TTCTTTGTTT TGCTATTTTC ACAGTCTTAT TCGCCAAAAG TAATACGGGA	1200
	ACAGCGAATA GTGTGTCACC ATATATAACT TTAATTTTA ATATTTGGCC AATTGCTTTC	1260
50	ATCCCgATTG TAITATGTAT GGCTTGTAAT TCGTTATTTA AAATTGAAAT GAGAAATAAA	1320
	TCATTTAATT ATTACTTAAG TAATAATTGG TCGATTACAA AAGAAATAAG AGCAAAGATT	1380
55	TTCATTTTAT CAATAGCATT TTTGGTACAT TGCTTTTTAG TATTTATTAT TGCTTATATA	1440

	TTGATGTATG TAGTATCTCT ACCATTGATA CCGCTCAACT TTTTATTAAC TCGATACTTT	1560
	GGTGTGTTTCG TATCAATATT AATAAACTTA GTATTATCAG TCATTGTGT CTTGTTTTTA	1620
5	ACATTGAAGA GTTTATTTTG GGTGTTGCCG TGGGGGATAA TGCAGAGAAT CCCGCTTATT	1680
	ACGCTTGGTA TACTACCTAA TGGtTTAGTT GTAAACCATA ATTCAAAATA CTTTAATGAT	1740
10	CTCAATGCCT TATATATTTT GATTATTGTT AGCATCATT TTTTCGCGAT AGTAACATTT	1800
	TTAAATAATA AGAAAAGTTG GCGATTAAAA TGATAATTAA CGAATTAAAG TCATGTAAGT	1860
	TGAAATTTTC TAAGCAAGCG CTCACATTTG TACCCATTAT TGTAACCATA TTGTTTATAT	1920
15	TATTTATAAA TTGGTATTTA AACGTAAATT TATGGAATGG TCGACAAATm AGTTTGTTTA	1980
	CAGCGAGTTT TAATGCAATT ACATCGCTAT TAATTTCTAT AAACGTCTAT CAAGTTATCA	2040
	ATTTTGAAGA AAATATTGGT CACTTTAATC ATATTTTAGG AAAAGCTAAT AGGCTAAATT	2100
20	GGTTAAATGC ATCAATGATT TTTACTTATA CTATTACAGC CATATGTATT CTATTAGCAT	2160
	CAATTAATTT ATTGTGGCAT TCACATGATA TGAAAATAAC ACTTATGTTT ATAGGcGTaT	2220
	CATTGTTTTT CAATGTaATT ATATTACTGC TACTTTTTAT TTTTAGTATT TTCATTAAAG	2280
25	ATGTAATGGC TATTGTTGTC GGAGTTTTAA TGTTTATTTT TAACGTTTAT TTTGGATTAG	2340
	AAGTGCTTGG AGATCATTCG TGGTTCTATT TACCAATCAC ATATGCTACA CGTTACGTTT	2400
30	ATATGTTTAn CGAAGGGGAG TATACCAGTT ACATTAAACAT TGGGCAATCT ATAThATTAT	2460
	CACGnTGCCG AT	2472

(2) INFORMATION FOR SEQ ID NO: 643:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 646 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 643:

ATAATATAGG AATTATTTTCG ATnACAGATT TTACGAATCG TGCTACGATG CAAAATGAAh	60
ATAAAGATCC ATATGGCGAA AAGTTAGCTT ATGGAATTGC TTTTAATGGC AGTGTGGATA	120
TGCAAGGGGA TAAACAAGTC ACAATTCCAA AATATAGTGT AGTTACAATT ACTGGCGAAA	180
ATAGTAAAAA TTATCGTGTT ACCGCCGATA ATAAGACTTA CTATGTTAGT AAAGATAAAT	240
TAGAATATTT TAACCCGGCA GGTTTATATC AAACGCATAG TTTTAAAAAA TTAGCACCAT	300
ATATGAAATC AAATTATAGT AATTACTATG CATACTTTAA TAGTCAATTA CATAAAAAGC	360

CACAACAACC GATACAATTA CTTTTCAATG ATAATAATCA GTTATACGGT TTTGTTTATC 480
 CAATTGTAGA TAAAAAAGAA TTAAAAGATA AGTTTAATAT TAACAATAAC ATTTGGATTA 540
 5 CTAAAGTTGG GAATGGATAT TGTATTGCCA ATTTGAAAGA AGACAAATGG ATTTATATTG 600
 AATTGTAGGT GTAAAGATGC TAGATAATAT TATTTTATAT TTAAAA 646

(2) INFORMATION FOR SEQ ID NO: 644:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 426 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 644:

20 TAATATCGGA ATTTGATAAT GAAGATATCT AATTTTTTAA TATTCGTAGC TTTTATTTTT 60
 CTACTTATTT TATGTTTATT TTTAATCTTA CAAATGACAA ACCATTAAAA GTAGCATCCC 120
 AACATCAAAC AAAAAAACAA TTCATCAAAT AAAAATCGCT ACAAACCAA GTCATTAAAC 180
 25 ACGCAATAAT TAAAATTTTC CACTCATTAT AATTCTGAAT TCCAAATGTC GAATTCCGAA 240
 AACCAAACCTC CAAATTCCAA AAACGCAACT CCAAAATTAA AAGCATTTCCT CTACCATTGC 300
 GGAAATGCTT TTTACATACT GgATTACTCT GTCATTAATG ATTTTACAAC GGgAAACCAT 360
 30 GTCGtCATGT ATGACCaaAG TAGCGTCGCT AtCaTaAgGt GGTTCGGATC TTTATTGGAT 420
 AATnAT 426

(2) INFORMATION FOR SEQ ID NO: 645:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 3241 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 40 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 645:

45 nTTATTTACC CACAACATGT TGCGACATTA GGTAAATGGG TACCTTATTT ACTTGGTATT 60
 GTTATGTTAG GTATGGGATT AACAATTACA CCTAATGATT TCAAAATGGT CTTTAAAGCA 120
 CCTAGAGCAG TAATTATTGG TGTCTGTCTA CAATTCAGTA TTATGCCAC ATTAGCATTT 180
 50 ATAATTGCAA AGTCTTTTCA TTTACCACCT GATATTGCTG TTGGCGTAAT ATTAGTTGGA 240
 TGTTGTCCGG GTGGGACATC AAGTAATGTA ATGAGTTATT TAGCCAAAGC TAACGTAGCA 300

	ATATATCTAT	TTGCAAATGA	ATGGTTGGAA	GTATCTTTCG	TGAGTATGTT	GTGGTCAGTT	420
	GTTCAAGTTG	TATTAATTCC	AATTGCTTTA	GGTATTGTTT	TGCAAATTAT	TAATCGTAAA	480
5	ATTGCTGAAA	AAGCTTCTAC	AGCTTTGCCA	ATTATATCAG	TTGTTGCTAT	TTCATTAATT	540
	TTAGCAATAG	TTGTAGGTGG	CAGTAAGCAC	CAAATCTTAA	CTACAGGATT	ATTAATATTT	600
	TTAGTAGTTA	TTTTACATAA	CGTATTAGGG	TATACGATTG	GATATTGGTT	AGCTCGTCTT	660
10	TTAAAATTAG	ATCGACAAGA	TCAAAAAGCA	GTCAGTATTG	AAGTTGGAAT	GCAGAACTCT	720
	GGTTTAGCTG	TGTCATTAGC	aGCATTGCAT	TTTAATCCAA	TTGCAGCAGT	ACCAGGCGCA	780
15	GTGTTTAGTT	TCATTCATAA	TATAACAGGG	CCTATTTTAT	CAAAGTATTG	GTCAAAAAAG	840
	TTATAATTGC	ACTAATAGAA	TGAAGTGGTC	ATCGGACTAT	GTAAAGCTTT	GATAAAGAGA	900
	AAAAATAGAG	GAGTAAATAT	ATGTATAGAG	CAGTTATATT	TGATTTTCGAT	GGAACAATAA	960
20	TAGATACGGA	ACAACATTTA	TTTAATGTTA	TTAATAAACA	TTTAGAGATG	CATAATGCCG	1020
	ATCCTATAAG	CATTGATTTT	TATCGTTCTT	CTATTGGAGG	AGCAGCTACA	GATTTGCATG	1080
	ACCATTTAAT	TAAAGCGATT	GGTTCGGAAA	ATAAAGATAA	ACTTTATGAA	GAACATCATC	1140
25	TTACTAGTAC	AACATTACCG	ATGATTGATA	CGATTAnATC	ATTGATGGCA	TTTTTAAAGC	1200
	AACGTCACAT	TCCTATGGCA	ATTGCCACAA	GTAGTGTGAA	AGCGGAAATA	ATGCCCACCT	1260
	TTAAAGCATT	AGGTCTAGAC	GATTATATAG	AGGTAGTTGT	TGGTAGAGAm	GATGTTGAAC	1320
30	AAGTTAAACC	TGACCCTGAA	TTATATTTAT	CTGCAGTACA	ACAATTAAAT	TATATGCCGA	1380
	CACAATGTTT	GGCTATTGAA	GATTCTGTAA	ATGGTGCAAC	AGCCGCGATT	GCAGCTGGAT	1440
35	TAGATGTTAT	TGTTAATACG	AATAAAATGA	CAAGCGCACA	GGACTTTTCT	AATGTAGATT	1500
	ATGTAGCAAA	AGATATTGAT	TACGATCAAA	TTGTAGCGCG	TTTCTTTACG	AAATAGGAGG	1560
	CGTATCATGA	TGGGTTACAT	TATATTGTTT	TTTCTAGCTG	GTCCAGTAAT	TTTAGGCGTT	1620
40	GGAAATTTGG	TGATTGGTCC	TATATTTAAC	AAACAGACAC	CATTTTCGCGT	GCAAGTAAGA	1680
	TCTTTTGTTG	kTGgkTcmAT	GrTTTACTTA	ATACTCGCAA	CAATTGGCTA	TTTTTTACTA	1740
	TTACAAGGTA	AACTTTAACG	AGAAAACCAC	CTTACCTCAT	TAAATGGACG	ACCATATGTA	1800
45	TGTGAAATGG	TAGAACGTTT	ATGTTTATGT	ATGAGATAGG	GTGGTTTAAA	TAGTTACATA	1860
	TATTTTAATA	ATAACGTCAC	GATGATAAGT	ACAATTAAGA	TAATATCTAT	GCCTACCATA	1920
	ATTGTAGCTC	TTGTTGCAIT	ACTTCCTTGT	TCTTTTGCTG	ATTTTCATAGC	ACGGTAGTTT	1980
50	GGCACAAAGC	TAATAATTAG	TAAGATTAAT	ACAATTACAC	CAATTAATGC	TGTTGTCATG	2040
	ATGAACGACC	TCCTTTATTT	TTTTCAATCA	ATTCCCAAAT	AAACGTAGCA	ATCACACCGA	2100

	CAATAATTAA TGCAATCGGT AAAGTCGTAC CGAGTTTAAAT CTTGCGCTCT GGAGAATTAA	2220
	TAATAGTAAA TACTGTAAGA CAAATGAGTA TGAAAGCAAG TGTGCAATA ATAGTTCTTC	2280
5	CAACTAAATA TAGGATGTCA GGTTTTCCA TACCGATATA ATTTATGATG AAAAATGCTA	2340
	CAGCAAAGAG TACCGATATT TTTGTAGCAC GTAGCAGTAT TTGTTTAAAC ATTGATATAC	2400
	TCCTTTTTTAA TATTATTAAA ATTATATCAT AATTACCAAG AATAGCTGAA GTTGATGTG	2460
10	ACTCAACGGT ACTTGAGCAA CTTTTTAAAT TTTTGTAGAA AATCACAAAA TAATTGTTTG	2520
	CAAAGTTGCA AAAGCCTGCT ATAGTAGTTC TGTAACGAT TGCATGGTAT GCAAATATTA	2580
	ATGTACCAA ATCGATAATT TATAGTATAA TTACGGCAAT AAGTTTTTTT ATGGATTTAT	2640
15	TTAGTATCAA TCAGAGATGG GGTAAGAAGT TATGGAGAAC AATGAACTAC AAAGGGGATT	2700
	GAGTGCCCGT CAAATTCAA TGATTGCACT TGGTGGTACG ATTGGCGTGG GGCTTTTCAT	2760
20	GGGTGCGACA AGTACAATTA AATGGACAGG CCCATCAGTT ATCCTTGCAAT ATTTAATTGC	2820
	GGGTATCTTT TTATTTTTAA TCATGAGAGC AATGGGGGAA ATGATTTATT TAAACCCTAC	2880
	AACAGGATCA TTTGCAACAT TTGCAAGTGA TTATATACAT CCTGCAGCAG GTTATATGAC	2940
25	AGCATGGAGT AATATATTCC AATGGATTGT AGTTGGTATG AGTGAGGTCA TCGCAGTAGG	3000
	AGAATATATG AAGTTTTGGT TCCCGGAATT GCCAACTTGG ATTCCTGGTG TTATTGCTAT	3060
	TTTATTATTA ATGGCAGCGA ATTTATTCTC GGTAAGCG TTTGGAGAAT TTGAATTTTG	3120
30	GTTTGCTTTA ATTAAAGTTG TAACAATTAT TTTAATGATT ATTGCTGGTT TTGGTCTTAT	3180
	nnTCTnTGGT TTTGGAAATG GTGGCCATGC GGTAGGTATT TCTAATCTAT GGACAAATGG	3240
	C	3241

(2) INFORMATION FOR SEQ ID NO: 646:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 1311 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 646:

	AGGCGTCAAC TCAGATGGTT TAATAATTGC CGTATTACCT GCTGCAATAG CACCGATTAA	60
	AGGTtCGAaC ACTAGTtGAA AAGGATAGTT AAATGGTGCA ATGATCAAAA CTGTTCCATA	120
50	AGGTTCTTTT TTGATATAGC TTTTGTGG AAATAAATAT AAAGGTGTGT CTACATTkTT	180
	TGTTTTAGTC CAGTTTTTAA GTTCcTTACG GGCAATTTTG ATACTTyTCA AAGTTATGCC	240

AATATCGCTC TCGTATGATT TAATAGCTTT GCTTAACTTC TTTAATTGCT CTTTTCTAAA 360
 ACTAATATCT TTAGTTTGTT GTGTATTGAA AAAAGCTTTA CTGTCATAAA ATTTTGTCTC 420
 5 AATGATATTC ATAATGAAAA GAACCTCCTT ATATGATTAT TTTGGAAAAA GCGATTAATT 480
 GATTTGAATG TTGTGGCCGT TAATTTTAAA TGGTCTTTCG AATTATATAT GTTGAAAGTT 540
 GAAAATAGAG CGATGAATCG TGTACATAAT AATATTTATA ACTTTAATCA TAACGAAAAA 600
 10 GG TAGGAAGA AAACAAAAT TTATACTCAA CATCGCAAAT ATTTTAAGAA AATGTAAAGA 660
 CAAAAGGGGA ATTGTATAGA AATCACTAAT CTGTGGGTTA GGGTAGCTAA AGGAATAAAA 720
 ACTACTATTG AAAAAGGGTT GTAAATTAGT CAAACGTAAA TAAAAACAG TTCATTGAAA 780
 15 GTGAAATAAA TTCTACTTTA ATGAACTGTT AGTTAAATAC AACATGTCTA TAATTAGACA 840
 GTAATATAGT ATTATTTTGT TAATGCTTCA GTGATTTGAG GTACGATTTG TTTTTTTCGA 900
 20 GAAACGACAC CAGATAAGAA GGCCATGTCA TCTTCTAATT GAACATTGAA TGtTCGCCAA 960
 CTTTATCTTT TTCAGCACCT ACAACTAAAA TTTTAGAATC ACTATTAATG ATGTCAGTAA 1020
 CAACAAGTAC AAATAAGTCA TATTTTTCTT GTGCACTTAC AGCTAACATT TCTTTTTCTA 1080
 25 rATCTTCTTT ACGATTTAAC ACTTCGTCAA GGTCAACAGC ATTAACCTGT GCAATACGAG 1140
 TCACATAGTC ACCCATAGTA AATGATTTAG CATCCATGTT TAATAAGAAT TCAACTGATT 1200
 TATCAGTTGT TGAAGCACCT GCTTTtAACA TATCTAAGCC GTACTTTTGA ATATCAACTT 1260
 30 TAGCAATATC TTTnAATTCT tCAGCTGCTT TAACATCTTG TTGTGTACAT G 1311

(2) INFORMATION FOR SEQ ID NO: 647:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1498 **base pairs**
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 647:

CATATACTTT TTCATTTCTT TACGAGATAC TTTACCAGAG GATTTAGACT TCATACGCTG 60
 45 ATCCATATGT GCTTGCCTTT CAGaATGTCC ACAAACACAA CGATATACCG CTTCTTTCCC 120
 TTTACCAAAC AACGTTAATT TCTTTTTACA GTTTGGACAT CTTGCATTTG TTTTGCCTG 180
 TACATTCTTT TTCGTCTTAC AAGATGGATC TTGGCACACA AGCATCTGAC CATTTTTAGT 240
 50 TTTAACTTTA ATCATGAATT TACCACACGT TGGGCATTCT GTGGTTGTTA AATTATCGTG 300
 TTTATATTTA CGATCACTAT TTTTAATCCC ATTTACAACA TCTTTCGTAA AATCTTTCAT 360

CCATTGTGcA GTTAAAAGTG GCGACGTTAA TTCTTCTGGT GCTAATTCTA ATATTTGTTT 480
 ACCTTTTGAC GTTACTTTAA TTTTACCGTC TCTTGATTCA ATGGCATTCA TATTAAATAA 540
 5 TTTATCGATA ATGTCGGCCC TTGTTGCAAC TGTGCCGATA CCACCTGTTT GTTTTAAAGT 600
 TTGCGCATAT TTTTATCCT TCAATTGAAT AAAGTTCTGA GGGTTCTCCA TCGCTTTTAA 660
 TAACGAACCT TCATTAAAAT ATTCTGGAGG TGTGTTTCA TGTCTCTAA TATTTGTTTT 720
 10 TGAAATCTTC ACTTCATCGC CTTCTGAAAA AGGCTGTTGC ATCTCTGTAA TAGATTCAAC 780
 TTGTCTAATA GATTTAAAC CTAAAACAGT TGTTACATTC TCTTTCAAAA CAAATGTGTG 840
 15 CCCTGCAACC TCTAAAGTTA CAGTTATCGC GTCATACTCG TGCGGAGGCA TTAAAGCTTC 900
 TAAAAACGC TCGACAATCA TATCGTATAA CTTTAATTCT CTATTACTTA AGTCTGACAT 960
 GACAGGTCTC ACTTCTGTAG GAATAATTGC ATGGTGATCA GATACTTTTT GATTATTAAA 1020
 20 TATCGACATT TTTGATGAAA ATGTTTTAGA CATTAAATGGG CGTGCTTGGT CTTTATATGT 1080
 TGTGCCATC GTCACCTGAA TACGTTCTTT CATAGTATCT ACCATATCAG TTGTTAAATA 1140
 GTTTGAATCT GTTCTTGAT AGGTTACGAC TTTATGTCTC TCATATAAGC TTTGAAGTGT 1200
 25 ATTCAATGTT TCTTTAGGTC CAATTTTATA ACGTCTATAC ATATCTTGTT GTAAATCTGT 1260
 TAAATTGTAC AGTGATTGCG GATACGACTT CTTATGTTTA GTAGCAACAG ATTTAATCTT 1320
 30 ACCATCGACA TTTTCAAAT TATTAACCAT CTGTTCTAAA GTTTCTTTAw TGGtATATCG 1380
 CTGATTTGaw TCTAGCTGAA AATCAAACCC TTTTACCGTT AATGATAATG TAAAGTATTG 1440
 TTGTGGnTTG AACTGATTAA TCTCTGTTG GTCGTGTAAT TTAATAAATT GAAACGGn 1498

(2) INFORMATION FOR SEQ ID NO: 648:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1044 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 648:

TAAAAACAATT CGTTTTATTA ATACAGTTTG TAAAAGTATT CTCTTAGTAC TAATAGCTAA 60
 TGTAATGATA GAAAATACTA GTGTTATTAA AGATTTGAAT AAAATAAAAG AAACGAGAA 120
 50 ATATTGGAAT GTATTAGATG ATTATTACAC GATTGAATTT GCACCTTATC ACGAAACAAA 180
 ACAAAGTTTG ATTGATAATA TGGTGCGATC AGAACAATTA GTAAAGGCTA GTGAAGCAGA 240
 AAATAATGCG ATTTTATTCA AACCAAAGGG TGACTCCGTT GACAATGACA ACTTTTCGCC 300

TCAACCTGAT ATTCCGATAA AAAATCAAAA AAATAATGTC GAAGTAATTA TTCCACAAAA 420
 GTTTCATGCA ATGCGTAATG AAATCAATCA AGCATATCAT TCATGGTTTG AATTTGTACA 480
 5 AAATAAAAAT AATAAAGAGA ATAAGTTATC TATACAGTTT ATCAACAAAA ATGATTGTCTG 540
 AATTTTTTCA TTTGATGCAC GAGATAGTCG CCATTTGTCA TTTATAGAGG CGCCAATCAT 600
 TGTGAATGTT CAGGCATCAG ATTTATCGaA TGATTTtAT TATGCCATGa TCaGTCaAGG 660
 10 CGGGTATTTa TTCaAAAATT ATGaCGCGCT AGTAAAAAAT ATTGGAAAAG TATCCATCTT 720
 GATGGGGAAA TCCAGTGGAA TAACCAATTA TAAAGATAGC GTGATGGAAA TGTATCATGA 780
 AAACAATTTG AAATTAACAG TACTCAACTT TTCACAAATC ATTATCGCAA TCATTTTAAT 840
 15 AATTATTATT TTATTTGATG TGAAATATTA TTTTGAACAG CATCGAAAAT TACTCGTAAT 900
 CAAAAGCTA TATGGTTATT CAACATTAAG AGCCAATTAC CAATACTTAT TAATAAATAA 960
 20 TATAGTTGTT ATTTTTATTG GAATATTGAC GAATGTAATT TTACATTCTC ACTATATAAT 1020
 GATGTTATTT GCAACGATTC TTGT 1044

(2) INFORMATION FOR SEQ ID NO: 649:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 399 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 649:

GAACATATTG GGTTATGCAA GGnGGTCACT CTTCACTT ATAAACAACA TTTTAATAAT 60
 GTAAAGTTTA ACCAGCTAAC ACTTTTGTTA GCTGGTTTTT ATTTTCCTTC AATTTTTTAA 120
 TGGTTAAGTC CCCTTCTATA TCTTATAAGA CAATCATTAT AATCAATTCA ATTAATACAT 180
 40 TAACAACCAC AACTAATAAA TATAGTAACT TCAAAATCCA TATTTATGTC TAAAGATAAT 240
 CTCAATGTTG TTCACGTCAA TAAAATTATC CCTAGGTTTT TAAAAATTGT ACATGTTTAA 300
 ACAATCAAAA GTGTACATTA TTAAATTATC ATTTCCAGTT AGATTTAGAA AACATTCA 360
 45 CCACGCATGG ACCAACGTAT TCGTCTTcAT TcATTTTAG 399

(2) INFORMATION FOR SEQ ID NO: 650:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 747 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 650:

GTACTAGGTT CTAnGATTCC CTA²CTGTAGT CATAGATATT TTCCAAACAG AGCCTGACAA 60
 5 CTTTTTCATTT TTAATAGTGA TCACTATATT AATCGCTATT GCAATTTATG CATGTCGATT 120
 TGTTTGGGTT TATTTCTGGT ACAAAGATTT TTATTTCCCG AAAAATATAC AATCTTATCT 180
 AGACGAGGAA CATGATTCAC ATGAAACACC ACCTTCTCGA GTGCGTTACG CATTTATTAT 240
 10 GACCATGTGT GGTATTCACG GTACAATTC ACTTTCAATG GCACTTACAT TACCATTTAT 300
 CATTACAAAA GGACAAGCAT TCGAATACCG TAATGATTTA TTGTTTATTG CATCTTTCAT 360
 GGTATTAATT AGTTTAATCT TAGCGCAAAT TGTTTTACCT TTAATTACAC CATCTGCCGA 420
 15 AGATACTACT TTAAAGGTA TGACTTATCA ATCTGCCAAA ATTTTCATTG TTCAAAAAGT 480
 GATCCAGCAT TTAAAAACG AAAGTAAAA AGACAAAAAC GATACAAATT ATCGCCCACT 540
 20 ATTAAACCAA TACTATGGAG AATTGTTATT TTTATTAAAT TCAGAACCTG ATAATCAAAA 600
 TACrAAAGAA CTCAAACGTT TAGAAGATAT TGCaAAAGTA ATCGAAACAT CTACACTTGA 660
 GCGTTTAATT GATAAAGGTA AGGCAACATA TCAGGATATT AATAATTACC GCAATATTGT 720
 25 CGAATTAACA GAGACACACC GTACTGC 747

(2) INFORMATION FOR SEQ ID NO: 651:

(i) SEQUENCE CHARACTERISTICS:

- 30 (A) LENGTH: 1373 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 651:

ATACAATACT CTTTTATTAT TCAATAAGCC ACTTCCTATA GCAAATGTTT AACTTTAAAT 60
 40 ATTTTTTCGAT GCTAACAAAA AATCACACTA TCATCTTTTA AAATGAAAGT GTGATTACAA 120
 GCAAATCTGT AAAATTTATA AAGCAGAAAC AATTCAACTT TATCATTATG ACATTTCAAT 180
 TAAACCTTCT ACATTATAGT TCCAAGCATC TTACACATGA ATGCAAGTAT TTAACGATTT 240
 45 AATTGTGACA TAGCCTGTTG ATATTGTGTT TCATTGATAT AATTTTGTTG CTTCATTTTT 300
 TCTAAGTTCTG TGCTTACACG TTGCGTAAAA TTCTCTGACA TATTATTGAT ATTATATACG 360
 CTAGGTGCAT TGACTTTACT AGCTAAAATA GCGCTTTGTA AAAGTGTAT GTGAGACATT 420
 50 GTTGTACTAT TTTTATTCAC GGTGTTCCA AAGTAATGGT TTGCTGCGCC CTCAAGCGTA 480
 TATTGATTAT CCCCAAAGTA AATATTATTT AAATAAAGC TTAAAATTC GTTCTTATTA 540

TCATTATCAT AAAAATAATT TTTGACAACT TGTGTGTAA TGGTACTACC ACCTTGCACA 660
TCTCTGTCGC TAATCGTTGA AAATAAAGCT CTAGTTGTAC CTTTCAAATC GAATCCATGA 720
5 TGATTGTAGA ATCGTTCATC TTCCATTGAA ATAAAGGCAC CTTTAAACATA CTCTGGCATG 780
TTATCAGCTG ACACAAACT ACTTTTATTT TCAATTTTTC TTAGTTCATC CACATTATCG 840
CGTGTAGATA AAAAATACAT GATACCAATA AACAATGCGA TAATGATTAG AATGGTTAAT 900
10 AATATTTTTA ATAGTATTCG TTTACTTTTT TTCTTTTTCG GCGGTTTGCC AACTGGTTGA 960
TAATACGTAT TATAGTGAGG TTCGTGTTTC ATATGCTCAA AATGTTTCATT TGAGTTTGAG 1020
TACCTATCGC TTCTTTTCAT GCGTTTGCTC CTTCTTTTAA AACTCACTTA GtATATACCT 1080
15 TGaGTTTACC AGTACTATCA CAAATAGGCT ACACTTTTTG GGAAAATCAG TCCAAGGGCT 1140
TACAATCGTA TACGCCATCA TACTTACTTT TTTGTTTTTT GAAAAAATTA TAGATAAATC 1200
20 ATTGCAATTT TAAATATTAA TCATGTCAA TATTGTTATA TTTTATAAAA ATAAAAGACC 1260
ATCCCTATTA AATGCCAATA GAGACGACCT TTTATTTGTT ATTCATTTAT TAAAACTAAA 1320
ATCCATATTT CATTTCAAAC GAAAATATAT AAATTTTAAC AATCGrTAAC CAC 1373

(2) INFORMATION FOR SEQ ID NO: 652:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 859 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 652:

GGCAGATAAT TTAGTCATTG TTGAATCGCC TGCAAAAGCA AnaACCATTG AAAAGTATTT 60
AGGTAAGAAA TATAAAGTTA TAGCTTCAAT GGGACACGTC AGAGACTTAC CAAGAAGTCA 120
40 AATGGGTGTC GACACTGAAG ATAATTACGA ACCAAAATAT ATAACAATAC GCGGAAAAGG 180
TCCTGTTGTA AAAGAATTGA AAAAACATGC AAAAAAAGCG AAAAACGTCT TTCTCGCAAG 240
TGACCCCGAC CGTGAAGGTG AAGCAATTGC TTGGCATTTA TCAAAAATTT TAGAGCTTGA 300
45 AGATTCTAAA GAAAATCGCG TTGTTTTCAA CGAAATAACT AAAGACGCTG TTAAAGAAAAG 360
TTTTAAAAAT CCTAGAGAAA TTGAAATGAA CTTAGTCGAT GCACAACAAG CGCGTCGAAT 420
ATTAGATAGA TTAGTTGGCT ATAACATCTC GCCAGTTCTT TGGAAAAAAG TAAAAAAGG 480
50 GTTGTACGCG GGTGAGGTTT AATCTGTTaG CmTTCGTTTA GTCATTGACC GTGAAAAATGA 540
nATTTCGAAAC TTAAACCAG AnGAATATTG GACTATTGAA GGAGAATTTA GATACAAAAA 600

aAAAGATGTT GAGAAAATTA CAGCTGCATT AGATGGAGAT CAATTCGAAA TTACAAACGT 720
 GACTAAAAAA GAAAAAACGC GTAATCCAGC AAACCCATTT ACAACTTCTA CATTACAACA 780
 5 AGAGGCGGcA CGTAAATTAA AcTTTmAAGC AAGAAAAACA ATGATGGTCG CACAACAATT 840
 ATATGAAGGT ATAGATTG 859

(2) INFORMATION FOR SEQ ID NO: 653:

- 10 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 747 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 653:

20 TTCAACTTCG TTTGGAAATC ATGTTCTCTCA ATTGTTGGAC TTAAACGAAT TTCTTTAACA 60
 TTGATAATTT TTTGTTTCTT TTTCAATTCT TTTTCTTTTT TCTGTTGTTT GAATTTGAAT 120
 TTACCGTAAT CCATAATTCT TGCAACTGGT GGTTCGTCAT TCGGTGCAAC GACCACTAAG 180
 25 TCTAAATCTA CACGTTTCAGC CATTTCTAAA GCTTCACGCT TTGATTTAAC ACCAATTTGT 240
 TCACCATCTT GACCGATTAA ACGTAATTCT TTTGCACGAA TTTTGTTCATT GATTTGAGTT 300
 TGATCTTTTG CTATGGTTGA CACCTCCAAA ATTTTACGA AATTTGCACC AAGCAAAAAG 360
 GAAGAGCAGG TATAAAATAC CCGCTCTTCC TTATACACAG TTATGTGTAA TGTGATTAAC 420
 CTGCCAACTG CTTTATGCGT CGCTACAGGT GAGAAGCGGG TGCTTCTACT TGGTTCGTTT 480
 35 CGTATTCAAC GTTATTAATC ATATCAACAA TTCACATTTA AGTCAACACT ATAAGTGTAA 540
 TTATTTTTAT TTAAACCTTT TATTTTCATCC ATTGACACGT CTTGACGTAA ATCTACTTGT 600
 TCTAATGGAA TTTTTTTCGT TTTATATCGA AGCTTATGAT AAATAAGAA TGCTAAAAAT 660
 40 ACTGGAATTC CCATATACGT AATTAAGAAG CGACTAAAAT TAAATCTCC TGTTTAAATA 720
 AAGTCAACAT CTTGCCCAAn AAnTACT 747

(2) INFORMATION FOR SEQ ID NO: 654:

- 45 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 501 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 50 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 654:

	TTGTGCTTCT TTTTGTAGCTT CTTGAACCTC TTGTGCCTCT TGTGATGTAT CACTyAAATT	120
	ATTTGCACTT GCTTCTTCTT TTATCGCTGC TTGTTGTGCT TTCAATGCCA CTGCTTTTGr	180
5	TTCTTyATTT GATACAGCCA CACTTTTATC CGCTTCTGCT TGTGCTTCTC TTTTAGCTTC	240
	TTGAATCTCT TGTGCTTCTT GTGATGTATC ACTTAAATTA TTTGCACTTG CTCTTCTTT	300
	TATCGCTGCT TGTTGTGCCT TTAATGCCGC TTGCTCATTT TTAGATTTGT TTAAAAATCC	360
10	TTCAACACGT TCTTTTGTAT AGGCAACCGT TTCTTCAAGT TCGGTTTTTC TTTCTTCAAA	420
	CTTTTGGGAC AGTTCTTGTh CTTTGACTTT nAAATCATCT GCTTTTTTGAT AAACTTTATT	480
15	TTAAAAATACC AACCTAAAGC C	501

(2) INFORMATION FOR SEQ ID NO: 655:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 830 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 655:

	CACCTTGTC TAATTAATTT TTTGATTTTT CATTTTACTG ATAATAGGTT CAGCATTAAAT	60
	CATGATTTAA CCTCCACAT TTAATCATT ACTTCTATTA TATATGATT C ATATTAAATG	120
30	TCAGTCAAAA AAGTTAGAAA TTCATTTTAA TGCATTTATA TTTCGAAAAT CCCTTATGTA	180
	TCTAAAAGCA TTTTTTAAAC TTGAATTTTA AAACACTAAA CAACACATAC GTCTCTGTGT	240
35	CATTTTCATT TTTTGTATGT CATATATATG TTTACTTCAT TTAAATCAAT TTCATCTTAT	300
	AATTTATCGT GTATTTTACA AAAGATTGAC TTCAATTCAT CGTAAAAGTT ATACTTTTGC	360
	CATTTTTTAA TGTAACATGG TGTTAGTAAT AAAAATAATA CATTGAGGTG TTTTACATGA	420
40	CAGCATTATT CCCTTATATC GCTTTTGAAA ATTCAAAGA AGCCCTTGCA TATTACGAAG	480
	AAGTATTTGG TGCAACTGAC GTTAAACGTT TAGAAGTTGG CGAAGAACAA GCGTCACATT	540
	TTGGTATGAC TAAGGAAGAA GCGCAAGAAG CAACTATGCA TGCTGAATTT GAAGTGCTTG	600
45	GCGTAAAAGT GTTATGTTCT GATTCTTTTG GTCGCGCTGA CAAAATTaAT AATGGCATAT	660
	CATTATTAAT TGATTATGAT GTTAACAATA AGGAAGATGC TGATAAAGTT GAAGCATTCT	720
50	ATGAGCAAAT TAAAGATCAT TCTTCAATTG AAATAGAATT ACCGTTTGCT GACCAATTCT	780
	GGGGTGGCAA AATGGGCGTC TTTACCGATA AATACGGTGT TCGTTGGATG	830

(2) INFORMATION FOR SEQ ID NO: 656:

- (A) LENGTH: 539 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 656:

10 GTATCCATGG GCCCGTTnCG CACAACATTT GgNACAATTA GGTACACGnG TTGTCaTCGG 60
 TCGTTTCGGT ATAATTTTAT CGAATGaAGG CGGTGCGTTA CAAACAATGA AACTACCATA 120
 CGAATATTAC ATTGGTGGTA AATTAGGTTT TGGTCAACAA TGGTATTCAT GGATTCATAT 180
 15 CAATGATTTA ATTCAAGCTA TTTTATTTTT AATAAATAAC GAGTCAGCTA GTGGTCCGTT 240
 TAATTTAACT GCACCTATAC CTGAACGTCA AAATTTATTT GGCTACACTT TAGCAAGAGC 300
 TATGCATAAG CCTCATGAAA CTTGGGCACC AAGTCTTGCA ATGCGTCTCA TACTTGGTCA 360
 20 AATGTCAACA GTAGTATTGG ATACTCAAAA AGTATTACCT aATAAAATTC AAGCATTGGG 420
 aTTCCAATTT AAATATAGTA ATTTAAAAAT GgNACTTGAA GATTTAATTA AAGAATAATC 480
 AATACCATTA ATGAGCATTA GAAACAACAT ATGTACTAAA TGTAATGTCT AGAGCGACT 539

25

(2) INFORMATION FOR SEQ ID NO: 657:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1106 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 657:

ATCAAGTTGA ATATCATCCA TATTTAACCC AACATAAATT GaRATTATAT TTGGCAGCAC 60
 AACGTATCGT gATGGaATCT TGGTCACCAT TGATGAATGC ACAAATTTTA AATGATGAGA 120
 40 CAATTAAAGA CATTGCTCAA GAATTAGGAA AGTCACCTGC CCAAGTTGTT TTAAGATGGA 180
 ATGTGCAGCA TGCTGTGGTT ACAATCCCTA AATCGGTGAC ACCAAACAGA ATCTCTGAAA 240
 ATTTCCAAAT ATTTGATTTT GAATTATCAG ATGAACAAAT GACGCGAATT GATGGTTTAA 300
 45 ATCAAGATAA GAGAATTGGA CCTGATCCAA AAAAATTTGA AGGCTAGATT AAAATCGCTC 360
 AACTGATGAA AAGGTTAGAT GAATTGTCAG GGCTTGGGAC ATTAAGTTCT TAGGCAATGT 420
 AAAAAAGCTG ATTTCTATTA ATTATTTGAT AGAAATCAGC TTTTTTGATA TGTATTTTAT 480
 AATGTACAGC TCGTTGAGCT GCTATTTTCC TTATATTAAG TGCCATTAAT ACAAACCTA 540
 GCTCTCGTTT AACTTTATTT AtTCCTCGAA CTGACGTTCT AGTTAAACCC AAAATAGCCT 600

55

CTGGTTCAGA AAGCTTTTGA TTAATTTGGA CTTTAAAGTA TTCCCAATTA TAATTCCTTCA 720
 TGATTtTCTT ATTGGATTTT GAATTTGGTT TCATGCATTG TTGCCTCAAA GAACATGCTG 780
 5 AACAGTCATC GCATTCATAT AGTTTGAAGT CTCGTTTAAA ACCATATCTA TCATTACGGT 840
 ATGCATATCT TTTAAACCT ATTCTTTTGT TATTAGGACA TATAAATTCA TCATTAAGTT 900
 CGTCATATTT CCAATTTTGA GTGTCGAAAA TGTCACTTTT AAACCTTCTA GTTTTATCtT 960
 10 TAATAAACAT GCCATACGTA ATAAGTGGCG TTTTATTAAA ATCATCTATA ATGGCCATAT 1020
 AGTTTGGCT CACTACCCAT AACCTGGCAT CAGCTACCAA ATGAACCGAA GGGATTTTGT 1080
 15 GAATCCATTG GTTGAAAAAA TGGGAA 1106

(2) INFORMATION FOR SEQ ID NO: 658:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 658:

TTTAACTTT ACTCTTTGAT TTAAAGAGTG ATAAATGTTT ACAGTTTAAT TAAAACTGCA 60
 TAAGAACTTC TAGCTTTTCT CTTTCGTTCA AAGAGAAGCA GCTGTTTCGA GTTTAATCAA 120
 30 AACCACATAA AGCTTTTAAC TTTACTCTTT GATTTAAAGA GTGATAAATG TTTACAGTTT 180
 AATTAAAACT GCATAAGAAC TTCTAGCTTT TCTCTTTCGT TCAAAGAGAA GCAGCTGTTC 240
 35 GCAGTTTAAT CAAAACCACA TAAAGCTTTT AACTTTACTC TTTGATTTAA AGAGTGACAA 300
 ATGTTTACAG TTTAATTAAA ACTGCATAAG AACTTCTAGC TTTTCTCTTT CGTTCAAAGA 360
 GAAGTTCTAA TACCACCATA TCGTGCGATC GGAACGGTA 400

(2) INFORMATION FOR SEQ ID NO: 659:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1899 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 659:

ATAATTACAA TGGCTACTGC AATTATTGTT GGAATTATAT ATTTCAAGTTT AGTCATCATT 60
 TATGCTCCCT TGATTTCAAA TTCATATCAT TAGTTTACCA TATTGAAGAT GATATAATAA 120

	AACTTTAACT	GAGCTTCATG	GGGCACCAGG	TTTTGAAGAA	GAAGTAAAAA	ATTATATGAC	240
	TCAGCAAATG	GCGCCGTACG	TAGATGAATT	TATTGAAAAT	CGTATGGGTG	GATTTTTTGG	300
5	TGTGAAAAAA	TCTAAAAATC	CAAATGCAAA	ACGTGTAATG	ATTGCAGCAC	ATATGGaTGA	360
	AATCGGATTT	ATGATTACAA	ATATCACTAA	AAATGGAATG	ATTCAATTCA	CAAATTTAGG	420
	TGGTGTTCGA	AATGATATTT	GGCAAGGACA	ACGCTTAGTA	ATTAAAAATA	GAAATGGCGA	480
10	TAAAATTATC	GGTGTGTTTT	CTAATATACC	TAAACATTTT	CGTACTGGTA	GTGAAGGTGC	540
	ACCGGAAATT	AAAGATTTAA	CATTAGATAT	AGGTGCTCAA	AATGAAGATG	AGGTGCGTGA	600
15	GCGCGGAATA	GATATAGGAG	ATACAATTGT	ACCTCACACG	CCATTCACAC	AGTTATCTGA	660
	ACATCGATAT	AGTGCTAAAG	CATGGGATAA	TCGTTATGGT	TGTGTCTTGG	CAATTGAAAT	720
	ACTAGAATTA	TTAAAAGATA	TAGAATTAGA	TGTAGACTTG	TATGTTGGCG	CAAATGTTCA	780
20	AGAAGAGGTT	GGATTACGAG	GTGCGAAAGC	ATCTGCAGAG	ATGATAGACC	CAGACGTTGC	840
	ATTTGTAGTT	GATTGTTTAC	CTGCCAATGA	CGTTAAAGGA	AACCAACCAT	TATCTGGTGA	900
	ACTTGGTAAA	GGGACGTTAA	TTCGCATAAA	AGACGGTACA	ATGATTTTAA	AGCCTGTATT	960
25	TAGAGACTAT	TTATTAAAGT	TAGTAGAAGC	ACATGACATT	GAACATCAAT	ACTATATGTC	1020
	ACCAGGTGGA	ACAGATGGTG	GAGAAATTCA	TAAAGCTAAT	ATTGGTATTC	CGACTGCAGT	1080
30	TATTGGTGTA	TGTGCACGAT	ATATTCATAG	TACAGACTCA	GTATTTGATA	TAAGAGACTA	1140
	TTTTGCAGCT	AGATCTTTAC	TTTCAGAAGC	CATTTGTAAT	TTAGATAATA	ATCAAATAGA	1200
	AACATTACAA	TATAAATAAT	CGGGTAATAA	CAACTATTAT	CTCTAAATAG	TTATATATAA	1260
35	TCATTAATTA	AGGAGACATA	AAAATGAAAC	AACCTGAATC	AGAACAACAA	TTTGAATCTT	1320
	TAAAACAAGG	TGCTACAGTA	TTTGAATTCA	CTGCAGGCTG	GTGTCCAGAT	TGTAGAGTGA	1380
	TAGAACCAGA	TTTACCGGAA	TTAGAAGCGA	GATATCCTAT	GTTTGACTTC	GTATCAGTAG	1440
40	ACCGTGATAA	ATTTATGGAT	ATTTGTATTG	AAAATGGTAT	TATGGGTATT	CCAAGTTTTT	1500
	TAGTATATAA	AAATGGAGAA	CTGCTTGGAA	GTTATATTGG	AAAAGAACGA	AAATCAATTG	1560
	AACAGATAGA	TGCATTTTTA	GCTCAATACG	TGTAATTTAG	ACTAGAGAAA	AACGGGGTAA	1620
45	TACTCGTTTT	TCTCTGTTAC	TATGTGTTGA	TTTATTGTAA	ACTATTATAA	GGTGCGAAAT	1680
	TAGGAGTGTT	ACATATGAAT	ACCTTTTCAA	TGAGAGATAA	ATTAAAGGAA	CGTTTAAGCC	1740
50	ATTTAGACGT	TGATTTTTAA	TTTAATCGTG	AAGAAGAAAC	TTTGCGTATT	TATCGAACAG	1800
	ATAATAACAA	AGGTATCACG	ATTAACTTA	ACGCTATAGT	CGCAAAATAT	GAAGATAAAA	1860
	AAGAAAAAAT	TGTAGATGAA	ATTGTTTATT	ACGTTGATG			1899

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 3774 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 660:

10	GTATAATATC CTTTCAATCT GTTTTCATAT TTTATATATT TTTTAAATAT AAGTGCTAAA	60
	TGTTTTAACT AAAGCATAGA TTGACAAGAT GTTATACAGA ATTTCAAATT CTATCCAATA	120
15	TTGTTCGAAG TGAGTATCA CTGGATTGGT ATTAACAAT GTAAAGGAGA GATTGCAAAT	180
	GCCGTATAAT TACAAGAAAC AAAATGGAGA GTTAATGTCT GTAATGAGCC AAGGTGAAAA	240
	GTTTATTCAT CAATCACCCG TTAATGATGA ACTTAGTGCA TTGATTAACT TATTAATTTT	300
20	TAAAATTAAC GGTGTGCATT ATTGTGTTGA TATCCATAAA AAAGAATTAA AGGAATTGGG	360
	TGTAaCACAA ATGAAAATTG ATGAAGTCTT GAGTTTTAGA CATTAGATT TATTTACTGA	420
	TCAAGAAAAA GTGACGCTTG AATTTGCAGA AATGTTAAAT TCAATCAAAG ACTTTAAGAA	480
25	GTTTGAAATT ATTGACCGGC TAAAATCATT TTATGATGAA GAACAAATTA TTGATCTTGT	540
	CTTTGTTGTA AACCAAATTA ACGGTTGGAA CAGATTAAAT ATTATTAGTG ATAGACTATA	600
	ATTGTTTATA TAAATGCAGA GTTTCATCTC GAACGCTATA TCATAACAAA TCATGCCACT	660
30	ATACAGGTCA AATCTTGTAT AGTGGCATT TAAATTTATCC CTTTGAATAC TGTATTTTAA	720
	CGAATATCGG TCCACCTGGT CCAACAGGGA TACCTAATAG GAACCAAATG ATGACAAATA	780
35	CTGTCCATAC AATACTTAGC GCGATTGAAT ACGGCATTAA ACTAGAAAGT AAGGCTCCGA	840
	GTTTCATGCG TTTATCGTAT TTTTGTGCAT AAGTTAATAA TAAAGGTAAG TACGGCATCA	900
	TCGGTGTAAT TGGATTGGTA ATTGAATCGC CTACACGGTA AATGACTTGT GTGAATGCGG	960
40	GATGAAAGCC GATAAGGATT AACATTGGTA CGAATATCGG TCCTAAAATA CCCCATTTAG	1020
	CCGATGCGCT TCCGATTAAC ATGTTGACCA TTGCACTCAG TACAATAATA CCTAGTATCA	1080
	ATACAATACC GTTTTGATGT TCTAATAATT TGGCACCTTT AACAGCAGCG ATAATTCCTA	1140
45	AATTACTCCA CTTTAAATAC GCAAGTAGCT GTGCTGCAAA AAACACAATA ACGATAAATG	1200
	TTCCCATGA TCCTACAGCA TCGCCGAACA TTTTACCTAA GTCTTTTGTA TTTTAAATTT	1260
	CTTTGCTTAA AATCCCATAA ACTAATCCAG GACTAAAAA TACGACAAGA ATAATTAATC	1320
50	CGACACCGTT AATTAATGGC GCATCGTCTA GTAAGCTGCC TGTTTTAGCA TTTCTTAAAA	1380
	AGCTATGTTT AGGAATGGCT GTAATAATTA ATAAATAAT TGTGACTATG AACTGATAT	1440

	CATCATGCAT TAAACTGTCA TCATATTTTC CTAATCTAGG AATAATGAGC TTAGTTGTAA	1560
	CTAGCAATAT CGTAGGAAGT AATACAACGA CACTCGCTGC GATAAAGTAC CAGTTCATAG	1620
5	CAACGTTTGT TTTAATAGAA TCTGAAACGA TACGTGTTGC CGGTTCTGTA AATGAATAGA	1680
	CCAAAGCATC TTGCATACCA ACAACTATAT TTGCTGCAAA TCCTCCAACA GCGGAAGCAT	1740
	ATGCCATCGT TAGTCCAGCG ATAGGGTGAT AGCCAATTTT AATAAAAAGC ATTGCTGCAA	1800
10	GCGGCGGCAA GATAATTGTC GCAGCATCGC CGGCTGTACT ACCTAAAATA CCAATTAATA	1860
	TAATAGTCGG TAAAATTAAG AAACGTGGTG CGCGATTCAC AACAGAAATC ATTAACCTAT	1920
15	CGAAGTATCC TGTTTTCTCT GCAACACCAA TACCAATCAT CACTGCTAGT ACTAAGCCTA	1980
	ATGCTGGGAA CTCTGAGAAA TTTTAAATCG TATCATTCAT TATCATCGTA AATCCATCAT	2040
	GGCTAATTAT ATTTTAAATA TAAATGGTTT GATGCGTACC TGGATGCTTA ACAGATACAT	2100
20	TAAATAATGA GATAACCCAT GTCATAATGG CTAAGCCAC ACACATTAAA AAGAATAAGA	2160
	CGCTAGGATC TGGCAATTTA TTTCCGATTT TTTCAACACT ATTCAAGAAA CGATTGACGA	2220
	TAGACCCCTT TTGTTGATGT TTTGATGTCA TCAATTATTC CCCCCTTTGT TAAATATTTA	2280
25	AAGTGTAACA AAAAATACTC TCAAAAGTAA CAATTTTCAG GAAATAAAAA AACTAATATT	2340
	GTTAAATATT TTGAGTTATT CAATAGAAAG TGTATAGCAG AGTAGTTAAG ACTGCCTGAA	2400
	GACTTATCTA TTAGGTTTAT GAAGCATCGA ACAGTGGAAG ATAAGGACTG TAAGTTTAAG	2460
30	ATATGTTGTA TAGGAGTGAC TGAATGAAAC GTTTGGAAAA TAAAGTAGCA GTCGTAACAG	2520
	GAGCAAGTAC AGGTATCGGT CAAGCTTCTG CAATCGCTTT AGCTCAATAA GGTGCGTATG	2580
35	TATTGGCGGT AGACATAGCT GAAGCGGTAT CGGAGACTGT CGATAAAATT AAAAGTAATG	2640
	GTGACAATGC GAAGGCGTAT AATGTGGATA ATGCAAGCGA ACAACAAGTG GTAGACTTTG	2700
	TGTCTGACAT AAAGGAACAG TTTGGAAGAA TCGATGTGTT GTTTAATAAT GCCGGTGTGG	2760
40	ATAATGCGGC TGATAGAATT CATGAGTATC CAATAGATGT GTATGACAAG ATTATGAATG	2820
	TAGATATGCG TGGGACATTT TTAATGACGA AAATGATGTT ACCTTTAATG ATGAATCAAG	2880
	GTGGCTCTAT TGTTAATACG TCTTCATTTT CCGGACAAGC AGCAGACTTG TATCGCTCTG	2940
45	GATATAATGC TGCGAAGGT GCAGTGATTA ATTTTACAAA ATCAATCGCA ATTGAGTATG	3000
	GCCGTGATAG CATTCGAGCC AATGCGATTG CACCAGGTAC AATTGAAACC CCGTTAGTAG	3060
	ATAAACTGAC AGGTACGAGT GAGGATGATG CAGGTAAAAC ATTTAGAGAA AATCAAAAAT	3120
50	GGATGACTCC GCTGGGACGT TTAGGTAAAC CAGAAGAAGT TGCTAAATTA GTAGTCTTCT	3180
	TAGCATCTGA CGACAGTTCA TTCATAACTG GAGAGACGAT TCGAATTGAT GGTGGTGTGA	3240

AATTATTTAA AATCGATATC CAGTGGAAAA GAATTTGGCA TGAAGTAGGC AATGTATGCA 3360
 TATTGTCGCA ATGAAAGACA TTAAAGCGG AGATTAATTA ATCTTTGAAA ATCACATATT 3420
 5 GTTCATTTGA AGTGTATTGC TTAAAGCTTG TTTTAACGTA TTGTAGGTCG TGCATCTAAT 3480
 TTATCAGAAT CTCGAGTTCA AACTTTTGGA GTATCTTTAA AATAAGCTGT ATTTTGTCTA 3540
 TTCTAATAAA TTAAGGAGAA TTTTATGTTA AAAGAAAAAG AAAGTTTTAG ATTGCTATAT 3600
 10 CAAGCTATAA GAGAGATTGC AGATAAAATT GGAGATAATC AGTTAGAAAC TAATTCCGTT 3660
 AGTTTATtAT tATTGGACTT TGATTTTGAA CATGAAGTAT TTGATGAATT GTATCTTGTG 3720
 15 ATTTtAAAAT ATTTAAATAC AGTAAGTATA GAGAACATAA GTCATAGTGA GCTT 3774

(2) INFORMATION FOR SEQ ID NO: 661:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1078 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 661:

TACTGGTTTT GGATTTTGGA GGTAATACAG TACCTAATAG TAATnATGGT GTCGTCAnAA 60
 TTATATCTTT CCGTGATGTT CTTACTCATT AGAACATCnG CCTTCAGAGG AATCATGATA 120
 30 CGAGGAATAA GAAATTTAA TGTGAGCGAA GTCAATATAG TATTTGCGAT TATTTTTATT 180
 AACTCCATTA TTATTGTTAG TTTGATTTTT CGAGGATAAC TTCAATTTTT GCATTTTGAG 240
 35 GTTTTTTAAC ATATCTATTT GCATCAGTTG ATGGCAACCT TTTACTTAAA TCTATTGTGT 300
 AGTTATTGTC TGCACCTGTT ATTTTAATTT GTCCTTTATT ATAAGAATTA TTATATAATT 360
 TTTTACTTTT AATTAATGTT TGACGAATAC GAAAATCTAA TTCTTTTAAA GTTAAACAG 420
 40 GCTTATTGCC TTCATAAACT GGAAATCCGC CAGTAAACGT TTCTGCTTTA TCTTTATATG 480
 TTACATTGAG TTTATAGTGT TTATCGTTAG ATGTTGCTGC AGGAGTAACA CCACCAGTAA 540
 ACGTTTCTTG AGATAATGCA AAAGaATCAA TGGTTTCTTG GTCTTTTATG CyAAAAATAT 600
 45 CAACGCTTTT ATTTCTTAAT TGGTTGATAT TGCCCCAACT TTCAGGTCCA TAACTTGAA 660
 TATGACTATA CCAAGaAAAC TGTAACAACG TTGCATGAAT CgTACCGTTA TCTTTTGCC 720
 ATAACGTACT GTTAGAGAAG GTTAAATATT TTTGCGAGTA ATATTTAGTT AACTCATTA 780
 50 CGTTAGTTTC GTTTTGATTT ATATAAtAAG cTTTCGCTTC AGATGAAGAA TTGATAkGTG 840
 TATTAGGAAA TTGTGTAGAT GCTGTACCTA ATAGTAACAA TGTTGTTGAT AAAATAATTT 900

ATAAAAAGGG GTTAATTAGA TAATTGAAAT TATCCGCATT TACAAAAGGT AATAGGTTAG 1020
 TTAGATTTTT CGAGTATGAC TCAATTTCTG CATTACGAGG ATTTTAAACA TAACGGTT 1078

(2) INFORMATION FOR SEQ ID NO: 662:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1398 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 662:

AACTTGCTTT TAGTATCTA CGTTAATATT AATAGCTTTA ATTTCACTTG TATTAATTAA 60
 ATCAGCTGTG TAAATACCTG CTTTCAAATC GATAACTTTC TTTGTTCCAT TTTTAAAGTA 120
 AACAGTATAT TTCGCTTGCT TCGATAGTCT TAAATCTATA TCACTAATAC CTCTGTCTGA 180
 TTTTAAACT GATTAACTC TATCCTCTAA ATCTTTATAA CTAATATTTT GATTCTTATT 240
 AAATGTAAAG CTTGATAAAA TATTTTGGCT TGTACCGTTC ACAGTGaTTG CATATGGAAC 300
 ATGGACTTTA GAATATCCAT GGTGTAACGA ACTTGATGAT TTATCTAATG GCTTAGCTGC 360
 GGCAGACGCT TCATTATTAT TAAAGTTTGC ACCTGTTGAT GCTAAAACAC CTAATGCTAA 420
 AGTTGTTGTA ATCAATGACT TAAATTTTCAT AAATTATCTC TCCTTTTTTG TGTAATTCGT 480
 ATTTGCAACT TAATTATAGC CAGACTTTCT CTATTTTTTG AATTAAGTGA ATATTAATAA 540
 TAAATTATCT TTAACAATAA TTTTAAACA CTGTTAAAAG TTCTTTTAAT TTTGATTAAAC 600
 TAATTAATTT ACAATACCTA AAATGTTGTT TGGTTTTGTT TATACCAAGC TTCAAACTTA 660
 AATGTCATAA CAACATTCAT TTCTTAATTC CTATTAGATT TGTCGATTAT ATTTACAGCA 720
 TCTTTATACT CAAAAACAT TACTTAAAA ATATAAATTC GATTTAATAA TTAATTTAAA 780
 TTTAGTTAAT CAATTTTGCA TCTATTTTGT TGTAAGCTAT ATAAAAGGAG TGATAATGAT 840
 GGTGAAAAAA ACAAATCCA ATTCACTAAA AAAAGTTGCA AACTTGCAT TAGCAAATTT 900
 ATTATTAGTT GGTGCACTTA CTGaCAATAG TGCCAAAGCC GAATCTAAGA AAGATGATAC 960
 TGATTTGAAG TTAGTTAGTC ATAACGTTTA TATGTTATCG ACCGTTTTGT ATCCAAACTG 1020
 GGGGCAATAT AAACGCGCTG ATTTAATCGG ACAATCTTCT TATATTAAAA ATAATGATGT 1080
 CGTAATATTC AATGAAGCAT TTGATAATGG TGCATCAGAC AAATTATTAA GTAATGTGAA 1140
 AAAAGAATAT CCTTATCAAA CACCTGTACT CGGCCGTTCT CAATCAGGGT GGGACAAAAC 1200
 TGAAGGTAGC TACTCATCAA CTGTTGCAGA AGATGGTGGC GTAGCGATTG TAAGTAAATA 1260

CAACAAAGGC TTTGTTTATA CAAAAATAGA GAAAAATGGT AAGAACGTTT ACGTTATCGG 1380
TACACATACA CAATCTGA 1398

(2) INFORMATION FOR SEQ ID NO: 663:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 1200 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 663:

TTGTAATTGG AACGTACGAA CTTTTCTAGG TAAGAAACGT CGAATCTCGT CCTCATTATA 60
ACCAACTTGT AGTCGTTTAT TATCTAAAAT AATTGGACGA CGTAATAAGC CAGGATTATC 120
TTGAATGATT GAATATAAGT CTTGTAATGG TAGTGAATCA ATATCAACAT TTAATTTTTG 180
GTATGTTTTA GAACGTGTAG AAATGATTTT ATCAGTACCG TCTTCAGTCA TTTTAAATAT 240
TTGCTTAATT TCATCAATTG TTAAATGTTT AGAAAAATA TTACGCTCCG TATACGGAAT 300
GTCcATGTTT tTGkTAACCA TGCTTTTCGCT TTTACGGcAA GATGTGcAaC TTGGtGaAGT 360
aAATAATGtT ACCATACATC TCACTCTCCT ATTTGAATGA ATAAAATTCA TTGCTTAAAA 420
TTTAGTTATA GATCAAGAAA AAACATTTTT TTCTAAAATT CTTAATCGTT ACTATTTATT 480
ATAACTATCT AACATTAAAA TTAAATGAGA AAAACCTAAT TTTTCAGATA AGTTTCTACA 540
CTTATAAAAA AGATTATTAA TCCCTTTGTT AGTAGTAAGT TATACGTATA TTCTAACACA 600
TCTTACATTT TTAAGAAATA CTGTTATAAT GATAATTATT AAAATATTAC TAAGAAAGTA 660
GGCATTTAAA TGGAGACATT ATTTTCAGGC ATCCAACCTA GTGGAATTCC TACTATTGGA 720
AATTATATTG GCGCACTAAA ACAATTTGTT GATGTGCAAA ATGACTATGA TTGTTATTTT 780
TGTATCGTAG ATCAACATGC AATTACAATG CCACAAGATC GTTTAAAATT ACGTAAACAG 840
ACCAGACAAT TAGCAGCGAT TTATTTAGCT TCTGGTATAG ATCCAGACAA AGCAACATTG 900
TTCATACAAT CTGAAGTCCc TGCACACGTA CAAGCAGGAT GGATGTTAAC TACGATTGCT 960
TCTGTTGGAG AATTAGAGCG TATGACGCAA TACAAAGATA AAGCTCAGAA AGCAGTTGAA 1020
GGTATACCTG CTGGTCTATT AACATATCCA CCTTTAATGG CAGCTGATAT TGTTCCTTAC 1080
AATACTAATA TCGTTCCAGT TGGAGATGAC CAAAAGCAGC ATATCGAATT GACTCGTAAC 1140
CTTGTAAGATA GATTTAATAG TCGCTATAAT GATGTGCTTG TGAACCTGAA ATTCGTATGC 1200

(2) INFORMATION FOR SEQ ID NO: 664:

(A) LENGTH: 787 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 664:

10 TGTACCTTTT GCTTTAATAA ATACTGTTTC TTTATCATAA TTAGGTTTCAG TTAAGAAATT 60
 AAATTGTAAG CTTTGAGTAA TATTTTTTTG ACTATCACTT GTTGTAGCTG TACGTGTATA 120
 CATTTTAGTA TCACCATCAA GATTCTTCTC AGAAACTTGT TTGATTTTCAG AATTAATCTT 180
 15 TGCAAATGAA GTAGCTGGTA ATACAGTGAA AGTAGTCGAT AGTGCTAAsG WACAAATTGT 240
 GATATTTTTTA CATAGTTGTT TAATCATTAG TAATCCGCCC TTTCAATATT ATCCTTCTTT 300
 ATAAGGTTTA TTGTCATCAG AATATTTATC AACGACTTTA ACTGTTTTAT TTTTCCAATC 360
 20 AACTTCATAA GTGACAATTA ATCTTTGACC ATCTTTATTT TtcTCTAAAA TTGGAGGTGC 420
 ATAATGTATy CCAGGTCTGT TTTTCAAAAT ATCTTGATTT CGTGTGTATG TTACTTCAAA 480
 25 TTGCGTTTTT TCATTGACT TTTCAATTAGA TAAATAAGTT AAAAATTCTG GATTAAAGCC 540
 ACTTCTTACT AATGCTGGGT ATCTATATTT TGAAGCAAAG CTTAGTTCaG GGTTTTCTAC 600
 AGTAGCAATT CTCGTATTTT TATAGAATAA TAATTCATCA TTTCTATTTT TCACTTCTCC 660
 30 ACCATACTTC AAGTCATTCG CAATAACTGA CCAGGTGACA TGgCCAGTTn ATTTATTTTT 720
 ACCGCTGGCA ATTGTGTCAT AATTTGCTGC ATCATCAACT AATCGTTTTG GAAGTAGCTA 780
 TTTGCTG 787

35

(2) INFORMATION FOR SEQ ID NO: 665:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 533 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 665:

45

TTATCTGTCA TTAACCACTG GTACATGTGA ACCCGGCnTn AATCAATATA TATATTTAAA 60
 AGCAAAGGCG CGCCATGTGC CTTTtTTnTA tTTTGTATAT CTGTATCAAA ATCGATTTGA 120
 50 TTAAAATCCG CTTTATTTTA TCATCTATTC AAATGATTTT AGTGCGCTTA TTTTACTATG 180
 GCATTATTGC CTAACCTGTT TGAGATATAT TAATATTTGA TGATTCGTAT TCAAAGTTTT 240
 55 CATTTAACAT GTATTTAGTA TCATGATAGC TGCTTCATTG ATGATATACT ACCTACTTTT 300

CAGAGGCAAT ATTGAACAAT TCTTCATCAT GACTATTTTC CATCACATAA CTATGCTTAG 420
 CGAACGCTAA CATATCTTTA TCATTATTTCG CATCTCCGAA GGCCATGAGC TCTGAAGGAG 480
 5 ACATTTCCCA TTTATCTAAC AATCGTTTTA ATGCCTGnCC TTTAGTCATG TTT 533

(2) INFORMATION FOR SEQ ID NO: 666:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 666:

GACTTCTCTT GCACTAAAAA TTGCTCAAAT TGCTCGCTGT CATAACCAGG CGGTGTTTCC 60
 20 AACCATACAT ATATGCCACC TTTAGCATGA ACAAATGGCA AATCAGCTTT TGCAAGCATG 120
 GCTTCGAATC GGTACGACG TGTTTTAAAT ACATTGCTTT GTTCTTCTAA AAAATCATCA 180
 25 TAATGGATT C AAAGCATATA TTGCGGTCAT CTTGTAAATG CACCAAACAT CCCAGCATTT 240
 GTGTGCGTTT GGTACTTTTT CAAAGCTTGA AATCATATCT TTATTACCAA CTGCCAAAAC 300
 CGACTCTGAA AACCTGGACA TGTGTATGAA CCTTTnAGAC AAGGGAAGAA ATTTGCAATC 360
 30 GCAACATCTT TGCCCATTTT nCCGAAGCAA GTGnGACTAG 400

(2) INFORMATION FOR SEQ ID NO: 667:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 412 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 667:

TCTCCAATGC TACTCAAATT AAAAAGGTTT TAAATATTGT TAATTCTGAT CCAGAGCGAA 60
 45 AGATTGTTAT CGTTTCTGCT CCAGGTAAAA GACATGATAA TGATATTAAA ACAACTGATT 120
 TGTTAATCAG ATTATATGAA AAGGTCATTA ATCATCTTGA TTATCATGAT AAAAAAGAG 180
 AAATTATTCA GCGTTATGAT GATATTGTAA AAGAATTGCA AATGGATGAA AGTATTTTAC 240
 50 GGACGATAGA TGTGACTTTG GAACATTATA TAAATCAATT AAAAAATGAA CCAAAGAGAC 300
 TATTAGATGC ATTACTTTCT TGTGGTGAAG ATTTTAATGC GCAyTGAtA GCyTTATATA 360
 ATAAtAGTCa gGTTACCAAC AAmATwTATA TCCcCGAAGG AAGCGGGTAT TT 412

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 668:

TTACTCGTTA AAGATATTGT AAAAGATGAA GTGACAGAAT ATGACATTCA TCAAATGTTA 60
 CCGCATCCGA TTAATATGGT AAGGGTTAGA CTTTTTGGTG TGAAATTAAA AGAGATTATA 120
 GCTAAAAGTA ATAAACAAGA nTATATGTAT GAACATGCAC AAGGTTTGGG TTTCAGAGGG 180
 AATATATTTG GAGGATATAT TCTTTATAAT TTAGGGTACA TTCATTCTAC AGGGCGTTAC 240
 TATCTGAATG GAGAAGAAAT CGAGGACGAC AAGGAATATG TACTAGGTAC GATAGATATG 300
 TATACGTTTC GTCTATTnC CCAACATTGA AGGATTACCA AAGAGTATTT AATGCCAGAG 360
 TTTTTCAGAG GTATATTTAA nGAAAATTAT TGGCTATTTA 400

(2) INFORMATION FOR SEQ ID NO: 669:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1236 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 669:

TGTTGATAT TTTTAAATTT ATCTTTTAAA TACAACAAC TTTTCCGTAA TGATTTAACT 60
 GTTTTATGAC TAATGCCATT GAATATTTCT AGCGTTTTAT TTAACCTATC GATAATCGCA 120
 TGTAATCCT TCAAATGTC TTTTGTTC AAGTAAATA CATTATGGAA GCGATGAATA 180
 TCATCATCAT AAACATCAGA ATCATTGATA ATCGTAAATA TCGTTGAGAA CAATTGCTCA 240
 TTTAACTCAT GAATCTCATT CATACTAGCC TTCAAGCCAA AAATATCAAT TGGTGCAATA 300
 TCTAATTTTT CCAAAATTCG CTGCTTTTCC AGTTGATCAA TTGCCTTTAA CAATTTTTCA 360
 TTTTCGTTTT TACCAATCAA ACCAAGCTGA TATTTAATAT CAGCATAACT CAACTCATTT 420
 GTCACCTGAT TTAAGGCATA GTCTGGTAAG CGATGTGCTT CATCCACTAT ACAATCATCA 480
 AACAAITGAT ATATTGAATT TTCAACATCA GAATGaATTA AATGTGCATG ATTTGTAATA 540
 CCAATTTGaA TGTTCGTGC ATTTTCGCTTA ATAAAATTAT aATAATGAAC ATCGTGACGT 600
 GCCGGTACAT ATGTTTCAAT TTTCTGGTcA AAATACATCT TTTGACCACC TTTTAAATTT 660

ATATTCACtT CGTAATTACT TGTGTCATCT TTTAAAATTT GACTAATAAG CCCCAATGAA 780
 ATGTAATCaC TttTACTTTT AATCAATAGT GCATTAAATTT TAAAATTCAA CGCTTCATTC 840
 5 ATTGCTGGAA TATCTTTTTT TAACAATTGA CTTTGCAGTA ATTTAGTATT GGTAGAAATC 900
 ATGACATGCT TCCCAGTTTC AATATTATAC ATCAAGGCCG CAAGTAAATA TGCTAATGAT 960
 10 TTACCACTGC CTAGTGATGC TTCAATCATT GCTTTTTTCAC TATGCATGAG CTGATCTAAT 1020
 ATAGTTTCCG CTAAATATAA TTGTTGCGGT CGATATGTTA AGCCAAGTTG ATCTACAGCT 1080
 TTGCTATATA AAGACTTCAA GCTGCCATTA TAATTTGTTG TCGGCTTTTT AAAATCAACT 1140
 15 TGCTTACGAT AGATAATCTG TTCGAACTTT TCGTACGATT TATCCAATGG CTTTGCATCA 1200
 TATTGCCTAA CCATCTCAAA GAAAATATCA TACAAA 1236

(2) INFORMATION FOR SEQ ID NO: 670:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 1819 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 670:

30 ACAsAATTAT TGACCAATAT GACTCGTGGA CTGATATGTT TAAAGCACTA CTGCATGAAA 60
 CATTTAAAGC ATATGGCGTT CTATTTATAG ATGCGCAGTT TGAGCCGTTA AGAAAAATGG 120
 AAGCGCCTAT GTTTAAAAAG ATTTTGAAAA AACATCAGTT GCTTGATGAT GCTTTTAGAG 180
 35 CAACACAACA ACGTACTCAA AATCAAGGCT TGAATGCGAT GATACAAACA GATACAAATG 240
 TTCATTTATT CTTACATGAT GAAAATATGC GTCAATTAGT tTCGTATGAT GGTAAGCayT 300
 TTAmATTAAA TAAACAGAT AAGACATATA TAAAGGAAGA AATTATAAAT ATTGCGGAAA 360
 40 ATCAACckGA ATTATTTTCT aATAATGTAG TGACAAGACC ATTAATGGnA GAATGGTTAT 420
 TTGAACACGG TGGCATTGTG TGGAGGACCG AGTGAAATTA AGTaCTGGGC TGAActAAAA 480
 45 GATGTATTTG AACTATTTGA TGTTGAAATG CctATCGTGA TGCCAAGGCT TAGAATTACT 540
 TATTTAAATG ACCGTATAGA AAAATTACTT TCGAAATACA ATATTCCATT AGAAAAAGTG 600
 TTAGTCGATG GTGTTGAAGG AGAAAGAAGT AAGTTTATTA GAGAACAAGC ATCACATCAA 660
 50 TTTATTGAAA AGGTAGAAGG TATGATTGAA CAACAGCGTC GTCTAAACAA AGACTTATTA 720
 GATGAAGTGG CGGGGAATCA AAATAATATT AACCTTGTTGA ATAAAAATAA TGAAATTCAT 780
 ATACAACAGT ATGATTATTT GTTAAAACGT TATCTTTTAA ACATTGAAAG AGrAAACGAC 840

5 GAAAGAATAT GGAATCCACT TCAAATTTTG AATGATTTTG GGACAGATGT GTTCAAGCCC 960
 TCCACCTATC CACCACTTTC TTACACTTTT GATCATATTA TTATAAAACC TTAATATACC 1020
 AAGGGTTTAG CCCGATTTAT CTTAATGATA AATCGGGCAT TTTTTTGTTT TTTAAAATAA 1080
 ATTTACACAA TTTTGTATAA ATAGTGGTGG ATAGTGGGGA GATGTGGTAA ATTATATATA 1140
 10 AGGTGAGGTG ATAAAAAATG TTCATGGGAG aATACGATCA TCAATTAGAT ACAAAGGAC 1200
 STATGATTAT ACCGTCCAAG TTTGTTATG ACTTAAATGA GCGTTTTATT ATCACAAGAG 1260
 GCCTTGATAA ATGTTTATTC GGTTACACTC TAGACGAATG GCAACAGATT GAAGAGAAAA 1320
 15 TGAAAACCTT ACCTATGACA AAAAAAGACG CACGTAAGTT TATGCGTATG TTCTTCTCTG 1380
 GTGCTGTTGA AGTAGAACTT GATAAGCAAG GCGGTATTAA CATCCCTCAA AACTTGAGGA 1440
 AATACGCTAA TTAACTAAA GAATGTACAG TAATCGGTGT TTCAAATCGT ATTGAGATTT 1500
 20 GGGATAGAGA AACTTGGAAT GATTTCTATG AAGAATCTGA AGAAAGTTTC GAAGATATTG 1560
 CTGAAGATTT AATAGATTTT GATTTTTAAA ATGGAGGAAT TGAAGtGTTT CATCATATCA 1620
 GCGTTATGTT AAACGAAACC ATTGATTATT TAAATGTAAA AGAAAATGGT GTGTACATTG 1680
 25 ACTGTACGCT AGGTGGAGCG GGACAnCCCC TTTATTTACT AAATCAATTA AATGACGACG 1740
 GAAGATTAAT AGCAATCGAT CAAGACCAAA CTGCAATTGA TAATGCTAAA nGGGTATTAA 1800
 30 AGGATCATTT GCATAAAnG 1819

(2) INFORMATION FOR SEQ ID NO: 671:

(i) SEQUENCE CHARACTERISTICS:

- 35 (A) LENGTH: 609 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 671:

40 ACCAATTATT GGACAGGAAT TAGCAAAAAA TGCAATGCTT GCATTAATCT ATGCATCGAT 60
 45 AGGTATCATC ATCTATGTAT CATTACGATT TGAATGGCGC ATGGGTCTTT CATCTGTATT 120
 GGCATTATTA CATGATGTAT TCATTATAGT AGCGATTTTC AGTTTATTTA GAATTGAAGT 180
 AGATTTAACA TTTATCGCCG CTGTATTAAAC AATTGTCGGT TATTCAATTA ATGATACAAT 240
 50 CGTAACGTTT GACCGTGTAC GTGAAAACCTT ACAAAGGTT AAAGTGATTA CGACAACAGA 300
 ACAAATTGAT GATATCGTTA ATAGATCAAT tAGACAGACA ATGACACGTT CAATTAATAC 360
 55 AGTATTAACA GTTATTGTAG TAGTAGTTGC TATACTATTC TTCGGTGCTC CTACGATATT 420

TGCCGTTCCG CTATGGGGAA TAATGAAAAA ACGTCAGTTG AAAAAATCGC CGAAACACAA 540
 ATTAGTTGTA TATAAAgAAA AGAAATCGAA CGATGAAAAG ATTTTAGTTT AAAAtGaATT 600
 5 AAGCGGTAT 609

(2) INFORMATION FOR SEQ ID NO: 672:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 2222 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 672:

CTTAAACAG CAATTGAAC GTTACAAAA TGAACAAATC TTTGTTTATG TTTGTCATGG 60
 20 TAATCACGAT CCTTTATCAT CAAAGATTTC ATCAAACCTGG CCAGATAATG TtnTTGTATT 120
 TTCAAATAAA GTTGAGACGT ATGAAGCAAT TACTAAATCT GGTGAAACAA TTTATATTCA 180
 CGGATTTAGT TATGAAAATA GAGCAAGTTA TGAGAACAAG ATTGATGAAT ATCCATCAAG 240
 25 TCAAGGCCAA AAAGGCATAC ATATTGGTGT CTTGCATGGT ACGTATAGTA AATCTTCAGT 300
 TAACGAAAGA TATACCGAGT TCATTTTAGA AGATTTAAAC AGTAAATTGT ATCATTATTG 360
 GGCTTTAGGT CATATACATG AACGTCAACA ATTAAGTGAT ATGCCTGTAA TTAACATTTC 420
 30 AGGTAATATT CAAGGTAGAC ATTTTAATGA GCAaGGTGAA aaAGGTTGCT TATTAATCGm 480
 GGGTGACCAC TTAaaATTAA AGACTAAATT TTATCCTACA CAGTATATTA GATTTGAAGA 540
 35 AGCAACTATT GAAACGGATA AGACATCTAA GCAAGGTTTA TACGAGGTCA TTCAAACTT 600
 TAAAGAACAA GTGAGAGAAG AAGGAAAAGC CTTTTATCGT TTAACGCTTG TTATTAATAG 660
 TGAGACATTA ATTTACCTC AAGATTTATT ACAAGTTGAA GAAATGATTA CAGATTATGA 720
 40 AGAAAACGAA AATCAATTTG TATATATTGA TGAGTTAAAA ATACAATATG CACAAAATGA 780
 TGAGTCACCT TTAGTTAATG AATTTTCAGC GGAATTATTA GTCGATCAAA CTGTTTTTGA 840
 TAAAGCGATG TCAGATTTAT ATTTAAATCC AAGGGCATCT AAGTTCCTAG ACGATTATGG 900
 45 AACATTGAC CATAAGCAT TAGTTAATCG TGCTGAAGAA ATATTAAAAG CTGAAATGAG 960
 AGGTGAACAA AATGATAATT AAATCACTTG AAATTTATGG TTACGGTCAA TTTGTTCAaC 1020
 50 GTAAAATTGa ATTTAATAAA AACyTcACTG AAA1TTTTTG TGAAAATGAA GCGGGTAAAT 1080
 CGACGATTCA AGCATtCATC CATTGATAT TATTTGGATT TCCAACATAA AAGTCTAAAG 1140
 AGCCAAGACT AGAACACGT CTAGGTAACC AATACGGTGG TAAATTAGTA CTTATTCTTG 1200

	TATATTTACC TAATGGTGCT GTGCGTGATG ATGCTTGGTT ACAAAGAAA CTTAATTATA	1320
	TTTCTAAAAA GACATATCAA GGTATCTTTT CATTTGATGT ACTAGGGCTT CAAGACATTC	1380
5	ATAGAAATCT AAATGAAAAA CAATTGCAAG ATTATTTATT ACAAGCmGGG GCTTTAGGAT	1440
	CAACTGAaTT CACGTCAATG CGCGAAGTGA TTAATCGTAA AAaAGATGAA TTATATAAAA	1500
10	aATCAGGTAA AAATCCGATC ATTAATCAAC AAATTGAGCA ATTAAACAA CTAGAAAGTC	1560
	AAATTCGTGA AGAAGAAGCA AAGCTAGAAA CATATCATCG CTTAGTAGAT GATCGAGATA	1620
	AATCATCAG TCGATTAGAG AATTTAAAGC ATAATTTAAA TCAATTATCA AAAATGCATG	1680
15	AAGAAAAACA AAAAGAGGTT GCTTTACATG ATCATTCAACA AGAATGGAAG TCTCTAGAAC	1740
	AACAGTTAAA TATTGAGCCA ATCACATTCC CAGAAAAAGG TGTGGATCGT TACGAAAAAG	1800
	CACGAGCGCA TAAGCAATCG TTAGwAAGAG ATATTGGTTT AAGAAATGAG CGTTTAGCTC	1860
20	AACTTAAAGA AGAAGCGACT CAATTAGAGC CAGTTAAACA ATCTGATATT GACGCCTTCA	1920
	TTAGTTTGAA TCAACAAGAA AATGAAATTA AAAATAAAGA ATTTGAACTT ACTGCAATCG	1980
	AAAAGGATAT TGCGAATAAA CAACGTGATA AAGATGAATT GCAATCAAAT ATTGGTTGGT	2040
25	CTGAAACGCA TCATGACGTA GATAGTTCAG AGGCAATGAA AAGTTATGTC AGTGAGCAAA	2100
	TCAAGAATAA ACAAGAACAA GCTGCATACA TTAAACAATT AGAACGTAGT TTAGAAGAAA	2160
30	ATAAAATCGA AGATAATGCG GTTCATAGCG AACTAGATTC TGTTGAAGAA AAATAGTTCC	2220
	TG	2222

(2) INFORMATION FOR SEQ ID NO: 673:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 406 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 673:

45	TTGCAGGTAT CATTTTTTTA ATGCCATATG GATTATGTTT TCTACCGTTT TATAAGCAAA	60
	AAAAGAAAAA ACAGACATTT AAAAAATACA TGGTTTACAC TACGATTGGT TTGTCAATTT	120
	GTCTAGGCTT ATCTCTAGTT TTGGTTCACA CTACGAAAAT TTATATGGAC GAAGGTGGCG	180
50	TAAGATACTA TTACGGTAGT TTTGTAATGA AACAAGCGGG CGGTTATGCT TATTTAGCTT	240
	TAGCGGTACT TTCAACGTTG TTAATTGTTG CGAAAAAGC TACAAATAAA AATAAAGAAA	300
55	TCGAAACCGT CGACAATACA AATATAACGG AAAGATAATT AAGGGAGTGC TCATTCAGGA	360

(2) INFORMATION FOR SEQ ID NO: 674:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 927 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 674:

CCACTTTGTG GATTTTCTTT ATATTCTCCA CGCTTGtACT ACAACTTCTT TCGTTTCTGT 60
 TTCATCACCG ACTGCCGCAT TCGTTAGCAC ATGTAATAAC TCTTTTGCGG TTAATACATT 120
 CTCATCTATA ATCTTATCTT TTTGTTCTTG TATATATTGC TTGATGTGCG GCTTTTTCAA 180
 TAACCTACAC GCTGTACAT GTGCGCTATT TGC GTTATAT CCTGyTTTTA TGGCACTTTG 240
 TGTTACATTC AGTGTCTAA TATACTCATT CACAAAACGT GCTTGCTTTG CAGTTAACTC 300
 ACTCATTTTA TCACCCCCAC AATTTTATCT AATATGGTTT CATACCATAA TATTACAGAT 360
 TGTTCTGAAC AATCTAAGGC ACTACTAATA TCTTGATAAC TAAGTCCTTG TATAAGGGAG 420
 TCAAAAATAT AAAACTCTTT ATCGGTCGCT AATCTGTCAA CAATCATTTT TATGTGATTC 480
 TTTATAATAT GATCATTGAC ATTATCGTCT GTCATCAATT CGTCAGAATC TTCATCACCT 540
 ATTAAAAAGA AATCATCAGT ATTTATTTCA TCATCGCCCC GTTAACTAGC TTTGAAGTCT 600
 TTAGCACACT TGCATATACC GGCTGTCTGT CTGGCKAGAT ACTAGCATTG AAGTGGTCTG 660
 ATATTGATTT TGAAAACAAC ACGATTAGTA TTAATAAAAC ATATTACAAT CCAAATAATA 720
 ACAAGAAGAA ATATCAGATA CTTCCCCCTA AAAGTGAAG TTCTATCGGT AAGATTTCCG 780
 TTGACCCAAA TGTAATAAAG GtGtTGCGtG ATTATAAGAT AAACGTTCAA AATAATTGGA 840
 AAAACGAATT ATATAATGAT AACCATTGTA ATGAAAAAAC TATCAATGTG GATACAAACC 900
 ATTATGTCAC GTACCAGCAT ACTCAA 927

(2) INFORMATION FOR SEQ ID NO: 675:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1100 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 675:

GATGTTAAnA TAAGTACATC ATTTTGACTC CAAATATTG GCTTTAGACC TTGAAATGCT 60

CTCATAATGG CATCAGGTAC cAGGGGTTGG GaccAGGTGT TAATAACAAC GGTTGATGAT 180
 AATACATTTA TATGCCTCCT ATAAATAAGA TTCACTATT TTAGCAAATT TTCTGAAAAT 240
 5 TTAAGGCCT AAAAAgtGAT AACGCTATAT TGTCGAACAA ACGTTATCAC TTAACGATTT 300
 TATTTGGCCT GAATGATGGG ATAGATTTTT ATGTCCACAT TATTTCTTAC AGCATTTGAA 360
 ATCATGCAAT TATTATCTGC AATTGTTATC AATTTTG GTA ATCGCTTTTC TAATTGTGCT 420
 10 ATTTGATCAC TTGGAATTTG AATTTGAGGA TGGTGCACAA TTTTGTGACAT ACTGAATTTT 480
 CCGTTATTTA AACAAGCTGT TCCAATCGAT TGTGTkCAA TTGAAATATC TGTGAACTTT 540
 GCACGTTCAA GAGTAGCTGC TAATGAGATG ATATAACATG ATGAAGCGGC TGATACTAAC 600
 15 ATTTTCATCGG GATTTGTTCC TATACCAACA CCACCTAAAG AAGCAGGTAT AGAAATATTC 660
 TCTGAAAGTA TGTCGCCTTG AACGTTTCCG ACATTGTTAC GACCACCTTG CCAAGAAGTT 720
 20 TGGACTTTAA AGTCATGTTG ATGCAATTGC TTTAACCTCC AATATAATTG TGATAGTTTA 780
 ATTTTAGAAT AGTTTATCAA AGTTTAACAG AAAGGTGACT TATCAATGAC TCTGAATAAA 840
 CTGAAAGATG AATTACAAAT TGTTCGCAC CGTGGATTGC CGAGTGATTT TCCTGAAAAT 900
 25 ACAATGGTCG GTTATCGAGA GGTAATGGGG CTCAATGTTG CTATGTTAGA AATAGATGTT 960
 CATTTGACCA AAGACCAACA TTTGTTGTG ATACATGaTG AAACAATTGa TAGAACATCG 1020
 GaTGGtArGG GGCgtAwTGc TGaTTACACA TTATCGCAAT TAAATCATT TGATTTTGGT 1080
 30 AGTTATAAAG ATGTTGCTTT 1100

(2) INFORMATION FOR SEQ ID NO: 676:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 460 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 676:

ATTAATTTCA TATGGAAATA GTTGAACATA CTGCGCTGTA TAAGCTTCAA CAGTTTGATG 60
 45 AATTAACGAT TGATCTTCAA TATATCCGTA GAACAAATCT TCAGTACAAA CTACTTTACC 120
 TTTATCAGGT TTAATTGCAC CTGCCAACAA TTGACCTACC AACGCTTTGG AAGATTCAGG 180
 50 TTCACCAATT ATACCTAATG CTTCTCCTTG ATAAATATGT AAATAATAT TGTTTAAATC 240
 GATATCTTCA GCATCATATC CAAAAGGTAA ATACCATTTC TTATTCTGTT TATTCTATA 300
 GTAGTGTGTT ACTTTTAGTA ACTTTAAAAC AATTGAACTT CCCATCTATT TTCATCCTTC 360

CCCCACGCaA AAATACCTTT TAATCTTnCT ACTTTAAAT

460

(2) INFORMATION FOR SEQ ID NO: 677:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1451 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 677:

15	GTCAAGTTTT CGGCTAGATT TTAAACGCTC ATCACTATGT AGAATGAAAC TTTCGAAAAA	60
	CTGTAAATCA TCATAACCTT TTACATAAAC ATAACCTTCG CCACCAATTG CTTGAATTAA	120
	ACATTGGGCG GCCATTTGAA TTTCTAAAGA TTGTTTTTCT AGCCTATTAA AGATACCTAT	180
20	TAGTTGTGTG TTTAAGATTT TTGACATCTT TATCCTCCAA TCTACTTATA AAATATTGTA	240
	ATTAATGACT ACATATTATG CAACGGCTTA AATTGTATAA AAATGTATAC GTTTGCATTT	300
	AGTATAACTA TCGCATTTTT CAAAAAATAC ACATTTAATC TGCAGTATTT CAATGCATTG	360
25	ACGCTATTTT TTTGATATAA TTACTTTGAA AAATACGTGC GTAAGCACTC AAGGAGGAAC	420
	TTTCATGCCT TTAGTTTCAA TGAAAGAAAT GTTAATTGAT GCAAAAGAAA ATGGTTATGC	480
	GGTAGGTCAA TACAATATTA ATAACCTAGA ATTCACTCAA GCAATTTTAG AAGCGTCACA	540
30	AGAAGAAAAT GCACCTGTAA TTTTAGGTGT TTCTGAAGGT GCTGCTCGTT ACATGAGCGG	600
	TTTCTACACA ATTGTTAAAA TG GTTGAAGG GTTAATGCAT GACTTAAACA TCACTATTCC	660
35	TGTAGCAATC CATTTAGACC ATGGTTCAAG CTTTGAAAAA TGTAAGAAG CTATCGATGC	720
	TGGTTTCACA TCAGTAATGA TCGATGCTTC ACACAGCCCA TTCGAAGAAA ACGTAGCAAC	780
	AACTAAAAAA GTTGTGAAT ACGCTCATGA AAAAGGTGTT TCTGTAGAAG CTGAATTAGG	840
40	TACTGTTGGT GGACaAGAAG ATGATGTTGT AGCAGACGGC ATCATTATATG CTGATCCTAA	900
	AGAATGTCAA GAACTAGTTG AAAAACTGG TATTGaTGCA TTAGCGCCAc ATTAGGTTCA	960
	GTTTCATGGTC CATACAAAGG TGAACCAAAA TTAGGATTTA AAGAAATGGA AGAAATCGGT	1020
45	TTATCTACAG GTTTACCATT AGTATTACAC GGTGGTACTG GTATCCCGAC TAAAGATATC	1080
	CAAAAAGCAA TTCCATTTGG TACAGCTAAA ATTAACGTAA AACTGAAAA CCAAATCGCT	1140
50	TCaGCAAAAAG CAGTTCGTGA CGTTTTAAAT AACGACAAAG AAGTTTACGA TCCTCGTAAA	1200
	TACTTAGGAC CTGCACGTGa AGCCATCAAA GAAACmGTTA AAGGtAAAAT TAAAGAGTTC	1260
55	GGTACTTCTA ACCGCGCTAA ATAATTAATA TTAGTCTTT AAGTTATTAA TAACGTAGGG	1320

AATAAATAAA ACAGTTTGAT TTTAAATGA AAGCGTAAAA ATGGTAAAAAT ATATCAAAAT 1440
 TGATTGTGAT A 1451

(2) INFORMATION FOR SEQ ID NO: 678:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 668 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 678:

nGTATTGAAG CGGTTAAACA AACACCTAAT GCAACTGACG AAGAAAAAGCA GGCTGCTGTT 60
 AATCAAATCA ATCAACTTAA AGATCAAGCA ATTAATCAAA TTAATCAAAA CCAAACAAAT 120
 GATCAGGTAG ACACAACTAC AAATCAAGCG GTAAATGCTA TAGATAATGT TGAAGCTGAA 180
 GTAGTAATTA AAACAAAGGC AATTGCAGAT ATTGAAAAAG CTGTTAAAGA AAAGCAACAG 240
 CAAATTGATA ATAGTCTTGA TTCAACAGAT AATGAGAAAG AAGTTGCTTC ACAAGCATT 300
 GCTAAAGAAA AAGAAAAAGC ACTTGCAGCT ATTGACCAAG CTCAAACGAA TAGTCAGGTG 360
 AATCAAGCAG CAACAAATGG TGTATCAGCG ATTAAAATTA TTCAACCTGA AACAAAAGTT 420
 AAACCAGCTG CACGTGAAAA AATCAATCAA AAAGCGAATG AATTACGTGc TAAGATTAAT 480
 CAGGATAAAG AAGCAACAGC AGAAGAAAGA CAAGTAGCAC TAGATAAAAT CAATGAATTT 540
 GTAAATCAAG CCATGACAGA TATTACGAAT AATAGAACAA ATCAACAAGT TGATGATACA 600
 ACagTCagCG CTgATAGctT GCTTTAGTGA CGCCTGACCA TATTGTTAGA GCgCTGCTAG 660
 AGATGCGT 668

(2) INFORMATION FOR SEQ ID NO: 679:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1906 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 679:

GATCCAAATT TAAAAGGAAA AATAGCCTTT AACGAATTTA CGAAACAAAT TGAATGTTTA 60
 GGGAAAGTGC CATGGAATAC TAATTTTAAG ACACGTCAAT GGCAAGACGG TGATGATAGC 120
 AGTTTAAGAA GTTATATCGA AAAGATTTAT GACATACACC ATTCAGGTAA AACAAAAGAT 180

	ATCGTGGGAT	GGACATAAAC	GCCTTGAAAA	GTTATTTATC	AAATACTTAG	GTGTTGAAGA	300
	CcTGaAGTGA	ATAGAACAAC	TACCAAAAAA	GCATTGACTG	CTGGAATCGC	TAGAGTAATG	360
5	GAGCCTGGAT	GTAAATTTGA	CTATATGCTT	ACACTTTATG	GTCCTCAAGG	TGTAGGTAAA	420
	TCTGCTTTGC	TAAAAAAATT	AGGTGGTGCA	TGGTTTTCTG	ACAGTTTAGT	TTCTGTTACA	480
	GGTAAAGAAG	CTTATGAGGC	CTTACAAGGC	GTTTGGCTAA	TGGAAATGGC	AGAACTTGCA	540
10	GCTACAAGAA	AAGCTGAAGT	TGAAGCTATT	AAGCATTTCa	TATCTAAACA	AGTTGACCGA	600
	TTTCGTGTTG	CTTATGGGCA	TTATATTGAA	GATTTTCCAA	GGCAATGTAT	TTTCATTGGT	660
	ACAACTAATA	AAGTTGATTT	CTTAAGAGAT	GAAACTGGTG	GAAGACGTTT	TTGGCCAATG	720
15	ACTGTAAATC	CAGAGAGAGT	TGAAGTGAAC	TGGTCTAAAC	TAACCAAAGA	TGAGATTGAC	780
	CAAAATTTGGG	CAGAAGCTAA	ACACTATTAT	GAACAAGGAG	AAGATTTATT	CCTTAACCCT	840
20	GAACTAGAAG	AAGAAATGCG	TTCAATACAA	AGCAAACATA	CTGAGGAATC	TCCATATACA	900
	GGCATTATTG	ATGAATATCT	TAACACACCm	ATTCCtAGCa	ATTGGGATGA	CTTAECTATC	960
	TTTGAACGAA	GACGATTTTA	TCaAGGTGAT	GTTGATATGT	TACCaACAGG	AAATGTaGAT	1020
25	TACGTTAAAA	GAAATAAAGT	CTGTGCGCTT	GAAGTGTTTG	TTGAATGTTT	TGGTAAAGAT	1080
	AAGGGAGATA	GTAGAGGATC	TATGGAAATT	AGAAAGATTT	CAAACATCTT	AAGACAATTA	1140
	GACAATTGGT	CTGTATATGA	TGGTAATAAA	AGTGGGAAAA	TTCGATTTGG	AAAAGATTAT	1200
30	GGTGACAGA	TAGCTTATGT	AAGAGATGAA	AGTTTAGAGG	ATTTAATATA	AGAAATATTG	1260
	AATAAATATG	CATTTTAGAG	TGTTGTATCA	GATGTTGCAT	CATTTTTTTGA	GTGATGCAAC	1320
	ACGGGAGTGT	AAAAAGTAAT	CGTAGGTGTT	GTATCATTTT	TGGTGATGCA	ACATTGATGC	1380
35	AACAAATGAT	ACAACACCTC	TTTCCTTTCT	AGCTGTAGGG	TTCAACCCTG	TTTGTTTCCA	1440
	ATGTTGCATC	AAATTCACTA	TAAAGTTTAA	AAAGTAGTGT	TAGGGAGTAA	AGGGGTATAG	1500
40	GGGTAACCCT	CTAACAGCTA	TTTTTAAAAAG	TTTGGCAAGA	ATTGATACAA	CATCGGAACA	1560
	CAAATATAAA	TTTTGTATAC	AAGGTGAATA	AATGAAAGAA	TCGACATTAG	AAAAATATTT	1620
	AGTGAAAGAG	ATAACAAAGC	TAAACGGTTT	ATGTTTAAAA	TGGGTCGCAC	CTGGAACAAG	1680
45	AGGTGTGCCA	GATAGAATTA	TTATTATGCC	AGAAGGAAAA	ACATATTTTG	TAGAAATGAA	1740
	GCAAGAAAAA	GGAAAGTTGC	ATCCTTTTACA	AaAATATGTG	CATAGACAAT	TTGAAAATAG	1800
	AGaTCATAAA	GTATATGTGT	TATGGAATAA	AGAACAAGTA	AAaACtTTTA	TCAGAwTGGT	1860
50	AGTGAACATT	TGGCGATTGA	CTTTCaaACC	ACATAGCTnT	CCAAAG		1906

(2) INFORMATION FOR SEQ ID NO: 680:

(A) LENGTH: 948 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 680:

10 AATTATTTGA ATAAATTAGC AATTAAAGAG TTGATTGTG AGTTTAAGyA TTTGAGTGCA 60
 TTTGAAAAAG ATGTCATGTA TTTAATGTGT GAACAAATA AGCCGAGAGA AATTGCTCAA 120
 TTGATGCATG TAAAAGAGAA AGTGATTTAT AATGCCATAC AACGATGTra AAATAAAATA 180
 15 AAACGTTATT TCAAAATGAT TTGAAAAGCG CCTTAGGACG TGAATTGAAT TATAACGTGT 240
 TACTTACTGA TGGTTTGACA TTTGTTATAA ATTTTATGTA TAGTATACTG GTATTATAAT 300
 GAATAAAGGT GAATTATTGT GAGAAAAATA CCTTTAAATT GTGAAGCTTG TGGCAATAGA 360
 20 AATTATAATG TTCCTAAGCA AGAAGGCTCG GCAACAAGAT TAACCTTAAA GAAATATTGT 420
 CCAAAATGTA ACGCGCACAC AATTCATAAA GAATCGAAAT AAATACATTC GAAATAATAC 480
 TTTGATAATA TGTTCAAAGG ATTTGGAGGT TGAGCAGATG GCTAAAAAAG AAAGTTTCTT 540
 25 TAAAGGCGTT AAGTCTGAAA TGGAAAAAAC AAGTTGGCCG ACGAAAGAAG AGCTATTTAA 600
 ATATACTGTA ATTGTAGTTT CTACTGTTAT ATTCTTCTTA GTCTTTTTCT ATGCCTTAGA 660
 30 TTTAGGAATT ACAGCATTGA AAAATTTATT ATTTGGTTAG AGGAGTGAAG ACATGTCTGA 720
 AGAAGTTGGC GCAAAGCtTG GTATGCAGTG CATACATATT CTGGATATGA AAATAAAGTT 780
 AAAAAGAATT TAGAAAAAAG AGTAGAATCT ATGaATATGA CTGAACAAAT CTTTAGAGTA 840
 35 GTCATACCGG AAGGAAGAAG GAAACCTCCA GTAAnAAGnT GGCCAAGCCT AAAACCGCCT 900
 GTTAAAAAAA ACCATTCCCC TGGGnTAnGG TTTTAAGTGG GAATTTAA 948

(2) INFORMATION FOR SEQ ID NO: 681:

40

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 863 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 681:

50 ACAnATAATA ACAAAGCGCT TGCTAGTACC TCTTAAAAAG ATGATGCTAG CAAGCGCTTk 60
 TCTATACTAT ATATTATTTT TCTAAAATTT TAACACCCTC TTGAGTGCCT ACAATAACTT 120
 GATCTGCCAT ATCTAAGAAG TATCCTGTCT CAAACACACC TGTCAGATGA ATTAAATACT 180

55

TATCAGTTAT AAATGCGACA TCTTCGTTTA CACGACGTTT TACTTTTATA TCAGCGTATG 300
 ATTCAATTTT ACGTAATATG TGATACCACT TAAATTTATC CACCTCTACT GGTAACCTAA 360
 5 ACGTCTCACC TAAGTATTGA ACTATTTTCG TTTTCATCGAC AACCACAACA AAACGCGATG 420
 CCATTTTCATC TATAACTTTC TCTCTGAACA GCGCACCACC GCCACCTTTA ATTATATTTA 480
 AAGATGGATC TACTTCATCA GCACCATCAA TTGCTAAGTC GATATGATCA ACATCATTGA 540
 10 TTTACATAT TTTAATACCT AATTCTTTTG CTAAAAATGC AATTTTATTA GAAGTGCATA 600
 CACCTGTAAT ATTGTAACCA CGTTCCTTAA TTAGTTGCGC CATTTGAGGT AAGAGTAATT 660
 15 CCATTGTACT TCCTGTACCA ATTCCCAGCG TCATGTCACC ATTGATTkGA CTTAAAACAT 720
 CATTTAATGT CATTAACCTG AGTGCTTTGA CATCTTTTCAT GAAGGTAGCC TCCCATATTT 780
 AtGTAATCTA TTCAATTCAT ATTTTACATG ACTCGTATAA ATTAACATAC CCTTAThGCT 840
 20 AACCATTTGT GTTAAACATA TCG 863

(2) INFORMATION FOR SEQ ID NO: 682:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 480 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 682:

TTCATTTTTG TTGTTTCAGCA ATTTTGGTCC GAATTTCAAT TCATCAGATG ATAGCTCTAT 60
 35 TAATTCTGTA GAATATTCTG CtACAACAAT TTCATAAATA TGGCCCTTTTT CTTCCATTAT 120
 TATTTTCATCa ATTATTTTCAT AATTCAATTG TTGTAATGTT TGTCTTAAAT TTTCAGTTTG 180
 GATATTACTT TGTAATAATCA ACCTTGGATG TTGACTTAAC TTATCTTGCC CATCTTTTAA 240
 40 AATTTTAGCA ATAAGTGGTC CGCCCATACC ACAAATTGTG aTATTATCGA TTACGTCCTC 300
 AGGTTGAATA ACACTTAAGC CATCCCCTAA ACGTACATCA ATTCTATCTA CTAATTGGTT 360
 TGCAGCTACA TTTTTCACAG CAGCTTGAAA AGGGCCTTGA ATAACCTTCTC CAGCAATAcC 420
 45 GaTTCGCATA AATGGTTTTG AATTGCATAG ATTGGCAAAT AAGCATGATC TGAGCCAATA 480

(2) INFORMATION FOR SEQ ID NO: 683:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 689 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 683:

CTGCAAAAAA TATTGGTATA ATAAGAGGGA ACAGTGTGAA CAAGTTAATA ACTTGTGGAT 60
 5 AACTGGAAAG TTGATAACAA TTTGGAGGAC CAAACGACAT GAAAATCACC ATTTTAGCTG 120
 TAGGGAAACT AAAAGAGAAA TATTGGAAGC AAGCCATAGC AGAATATGAA AAACGTTTAG 180
 GCCCATACAC CAAGATAGAC ATCATAGAAG TTCCAGACGA AAAAGCACCA GAAAATATGA 240
 10 GTGACAAAGA AATTGAGCAA GTAAAAGaaA AAGAAGGCCA ACGAATACTA GCCAAAATCa 300
 AACCACAATC CACAGTCATT ACATTAGAAA TACAAGGAAA GATGCTATCT TCCGAAGrTT 360
 15 gGcCCAAGAA TTGAACCAAC GCATGACCCA AGGGCAAAGC GACTTTGTTT TCGTCATTGG 420
 CGGATCAAAC GGCCTGCACA AGGACgTCTT ACAACGCaTA AcTACGCACT ATCATTcAGC 480
 AAAATGACAT TCCCACATCA AATGATGCGG GTTGTGTAA TTGAACAAGT GTACAGAGCA 540
 20 TTAAAGATTA TGCGAGGAGA GCGTATCAT AAGTAAACT AAAAAATTCT GTATGAGGAG 600
 ATAATAATTT GGaGGGTGTT AAATGGkGGa CaTTAAATCC mCGTTCATTC mATATATAAG 660
 ATATATCACG GTAATTGCGC ATATAACTT 689

(2) INFORMATION FOR SEQ ID NO: 684:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 858 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 684:

TTATTAAATT GGTATGTGTT CATTATACAT ATGaCAAATA TGaATGTAAA CCGATAATTT 60
 AGATTTTTTG GAATAACCTG AAAATTCAAG TTaTAGCGTT GCTTATATTT TAAAAGGTGG 120
 40 TGATAATGAG ACTTTTTGAA AAATAAAATT CAAAATACTT ATAGCATAAT CAATATGCAC 180
 ATTAAATAAA TGTACTCTTT TAATGCGTTG ATAAGTGTAT TTGTAATTTA GAGAAGGGGT 240
 GTTCACTATG CTGATGTGTT AAAAAATAAA ATAAAAAGGA CACCTCGATG CTATAAATAT 300
 45 TAGCATCGAG ACGCCCAGTT AATGTCTATT AAATTGAATA TAGTCTCGGA CATGAATCAA 360
 TGCCCTAGGC CCTGCAATGT TATATTGACA GTAGTTGACT GAATGAAAAT GACTTTGTAG 420
 50 CTAGCTTTTT TCAATCCTTG TCGGTGCAAC ACATAGAGAA ATTGGATTCC TAATTTCTAC 480
 AAACAATACA AGTTGCGGAA TAAGTCCCAA TATAGAAGGT GACAGTAAGC CAACTTACAA 540
 TAATGTGCAA GTTGGTCGGG CCTCAATACA GAGATTTTCG AAAAGAAATT CTACATATTA 600

GCCACCTTGT TTATTTAAAT CGATAACACG GTTTGCGATT GTATTGATAA ATTCAAAGTC 720
 ATATGAAGTA AAGATAATAG AACCTTTGAA TGATTTAAGT CCATCATTAA CAGCAGTAAT 780
 5 ACTTTCTAAG TCTAAGGGTT GTGGGTCATC AAGTAAAAGA CGTTGCCCTG ATAACATCAT 840
 TTACTAGCAn CACGACTT 858

(2) INFORMATION FOR SEQ ID NO: 685:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1747 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 685:

20 TTAGTATTTT CAGGnTGGA ATTGATGTTT GAAATTCAC T GAAATGGGCC AGAACCTgAA 60
 ATGaAACTTT ACCAACAATT TGGtCTTCAT CAATGAGGCC AAACGCACGG CTATCTTTAC 120
 TTACTTCACG ATTATCTCCA AGCACTAAAT ATTTACCTTT TGAATGACA TTTGATTTAG 180
 25 GATTTCGATT CGGTAAATCT TTAAGTTGGA AAGTCCAGT AATGTAATCA CCTTGTTTAT 240
 GTTTTAAATT GTAGTTTAAA TATGGTTCAT CTGTTTTTTT ACCATTGACA TATAATGTAT 300
 CATTTTTGTA TTCTACTTTA TCACCAGGAA CACCGATGAC ACGTTTAAACA TAGTCATCAT 360
 30 TTTTGTGTC ATGGAAGACA ACTACATTAC CTTTTTCCAA ACCACCTGTT TTATATCCAA 420
 CAATGTTTAC AGCTACTCGC TCGCCATCTT TCAAAGTTGG ATCCATTGAT TCACCTTTAA 480
 35 TTGTATATGG CGTAACAATA AATTACCTA CTATAAATAA AATGACAAAA GCGACTGCAA 540
 TTGAAATAAT CCATTCCAAT ATTTCTTTTT TCAATTTTGA CACCTCTTTT TAAGATTTGA 600
 ACTGAACAGT CCATTTTGAA AAAGGATAGT ATCGTAAACt AACATTACCA ATAATAtCCT 660
 40 TTTTATCGAT TAAACCAAAT TGTCTTGAAT CGTGCTTGtK ATTATCTTGA TCATTTAGCA 720
 CAACAAAATT GTTTGGCGGA ATAATATCAC CATCTAATTC TTTAAAATTG CGCAAACTAA 780
 AATCTTTAAT TTTTCTGTTT TTGGCATAAG ATGCGTCAAC CGGTCGGTCA TCACGGTATA 840
 45 ATTGTCCCTG ACGAAACGCC ATTGATTGAC CAGGTTTGGC AATAATTGGA CTAGTATATA 900
 TCTCGTTACC ACGCCTATAT GTAATGATAT CACCATTATT CAATTGATTA AATGTAACCT 960
 50 TAATTTTATT TACAATAACA CGATCCCCCT TGTAAAGGGT TGGTGACATA TCATTATTCTG 1020
 GAATGACATG ACCAACTATT ACAAAGTTT GTACGAACAG TACAATGATA ATAGCAAAGTA 1080
 TCAATGAAAT CAAATATTTT ACAACTTTTT TCACGATGTC ACTCCTTTTT CGATCCCATA 1140

	ATCCCTCTTA AAGGATGCGT TAAAATTGTA GTAATTTCTT TACCTAAATA ACCTAAAATA	1260
	ATTGTTGAAA CTAACCTTGA TGATGCCAAA ACAATGAAAT AATATTTAGG TCTAATATGA	1320
5	GATAGACTCG CTACAAAATT TATTAATGTA TTTGGCGTAA AAGGAAAACA AAGTAAAATA	1380
	AACAATGGGA TTAATCCTTG GCGATCAATA AACTAATCA AGCGTTGAAC AGCAGTACGT	1440
	TGTTTAATTC GCTGCATCCT CTCAGTGTTT ACCAATCGTT TACAGATCAA ATAGACTGTA	1500
10	AATGTTCCAG AAATTAATCC AAGCCAACTA ATCAATATAC CTAAAATAGG TCCATAAGCT	1560
	TGAATGTTAA TTAAAATATA GAGTGCTAAA GGAAATACTG GAATTATAGC TCTAATATAT	1620
15	AACAATATAA ATCCAGGTAA ATAACCAAAC TGTCGAAATA TCTCAAACCA TTCTTCTACT	1680
	TGATGAAACG ACAAATCATC AATCCCTTTC TTTGGTTGAA GATAATTATT CTTACATTAT	1740
	AAAGTTA	1747

(2) INFORMATION FOR SEQ ID NO: 686:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 645 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 686:

30	CGTAAAGATT ACTATTTAGG AGGGTGACTA TGAAAAAGAA ATTAGGTATG TTACTTCTTG	60
	TACCAGCCGT AACTTTATCA TTAGCCGCAT GTGGGAATGA TGATGGAAAA GATAaAGATG	120
35	GCAAGGTAAC AATTWAAcGa CaGTTaTCCm TTGCAATcAT TTgCAGAGCA AATTGGTGGA	180
	AAACACGTGA AGGTATCATC AATCTATCCA GCAGGGACAG ATTTACATAG CTATGAACCA	240
	ACACAAAAAG ATATATTAAG TGCAAGCAAG TCAGACTTGT TTATGTATAC AGGGGATAAT	300
40	TTAGATCCGG TTGCTAAGAA AGTTGCATCT ACTATCAAAG ATAAAGATAA AAAACTGTCT	360
	TTAGAGGATA AATTAGATAA AGCAAAGCTT TTAAGTGATC AACACGAGCA TGGTGAAGAG	420
	CATGAACATG AGGGACATGA TCATGAGAAA GAAGAACATC ATCATCATCA TGGTGGATAT	480
45	GATCCACACG TATGGTTAGA TCCTAAAATT AACCAAACCT TCGCTAAAGA AATTAAAGAT	540
	GAATTAGTGA AAAAAGATCC AaAACATAAA GATGACTATG AGAaAAACTA CnaAAATTAA	600
50	ACGACGATCT TAAGAAAATT GATAACGATA TGAAGCAAGT TACAA	645

(2) INFORMATION FOR SEQ ID NO: 687:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 956 base pairs

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 687:

TTTGTTACTG CTTCTAAAAT AATATCCTTT AATTGTTTAA CATGTTGGAT TGTCATATGA 60
 10 GGTGATGGTA CATTAAAAGG ATTTAATTCA TCTATTTGTG CATATTGATT TATGACATCT 120
 TGATGCATTG AAATAGGGTT GATATCATTT GTTACTACTT TATTAGATTG GTCTTGTGAC 180
 ATACTAATGG TGCCACCAGT ATGAATAACA AGTAGATGTT TCATATATTT CCTCCTATAT 240
 15 TTAATTTACC TAATTATGAT AAAATATTAT TCATAAAACG ACAAGGAAGG GAAATGACGC 300
 ATGAAAGCCA TTAATATTGC ATTAGATGGT CCAGCTGCTG CCGGAAAAAG TACAATTGCG 360
 AAACGTGTAG CCAGCGAACT ATCAATGATT TATGTCGATA CAGGAGCAAT GTATCGTGCA 420
 20 TTAACATACA AATATTtAAA ATTAACAAA ACTGAGGACT TTGCAAACT AGTTGACCAA 480
 ACAACATTAG ATTTAACTTA TAAAGCAGAT AAAGGTCAAT GTGTCATTTT AGATAACGAA 540
 GATGTAACAG ACTTTTtAAG AAATAATGAT GTGACGCAAC ATGTTTCATA CGTTGCATCT 600
 25 AAAGAGCCAG TACGTTcATT CGCCGTTAAA AAACAAAAAG AGTTAGCTGC AGAAAAAGGT 660
 ATCGTAATGG ATGGTCGCGA TATCGGAACT GTAGTGCTAC CAGATGCAGA TTTAAAAGTA 720
 TATATGATTG CATCAGTTGA AGAGCGAGCA GAAAGAAGAT ATAAAGATAA TCAATTAAGA 780
 GGTATCGAAT CAAATTTTGA AGATTtAAAA CGTGATATTG AAGCTCGTGA TCAATATGAC 840
 ATGAACCGTG AAATATCACC ATTAAGAAAA GCAGATGATG CAGTGACATT AGATACGACm 900
 35 GGCmAGTCGA TTGAAGAAGT TACTGACGAn ATTTTtAGCGA TGGTGAGTnC AATTnA 956

(2) INFORMATION FOR SEQ ID NO: 688:

(i) SEQUENCE CHARACTERISTICS:

40 (A) LENGTH: 1166 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 688:

AAAAGGGAGG AAAGAGAACA GTTAAATATG AATACAAAAT AATTTTGTTT TCGGACAGCA 60
 50 GGGGTATTAG ACGCGATTGA CAATGTCtGT TTAATTAAAC GTAATGTTTA TTTAAGCGAT 120
 GAATATTAGG TGAAAAGTTT TTGAATTtGA ATGTAATTGA GGTtTATTGA TTAGACATTT 180
 TATTGAATTG CGTGTTATTA TATAAATGTA AAAATAAGAC GACATGCGCG AACATGTCGT 240

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TAATGCGGAA TGGTTTTTTT ATTTTCCGCT AATTGAAATA AAAATGACGT TTTAATATAT 360
 TATGGGCTAG GTGGTTTGTA AGAAAGGGTT AGTTATTAAT GTTTTATGAA TTAAGGAAAT 420
 5 TTGAGTTTAA GGTTTAATCA ATTGTGATTT TGTGTATGAA GCGTTTAGTT AGAGTATTTT 480
 CGCCACCACT AGTTACTCCT TCTCCCACTT TACCCGAGAC TGGAGAAGAG CTATCTGAAG 540
 AATAAATAGA TACTTTTTGG CCATTTTGTA GTAAACCAAG ACCTTTTAAC TkCTCGGTTA 600
 10 GAGAATTCCA TGTATTTTGA GCATCTAGCT TTTTGTTAAA GTCAyCGTAG ACATTTTCCT 660
 TAGTTAAATC AATTTGTTTT AATCCTTAA AGTCTATAGA TTGTGTTAGA TGGCCTCCAT 720
 CATCATTTCC AGGAGCAGAA ACGCTGCTAG AATATCCATT GCTTAATAAA TAAGTAACGT 780
 15 TGATTGTTTC GTACTCGTTA CTTAAAATAA TATCAGAATC ATGTAAGaAT CTTTAACTTT 840
 TTTCCATAAT TGACCATCTG TCATTTTTTC TTCTGCTTTA GCCGTTTTAA CAACTTTATT 900
 20 TGTATCTAAT CCTAAGTATG AGAATGTAA GCCTGTTCCCT AATGTTGTTA ATACTAAAGC 960
 ACTTGCTACT aATGTTTTAC CTAAAAAttT TGTATTCATT TTTATTGCTC CTTtTTTTAT 1020
 ATTGTAAACG TTTACAATGA AAATATAATA ATAATTTTTT AAAAGAACAA TTAACTAAAT 1080
 25 ATCAAAAATG TATTAATCTAT CTATTAATAA AAAAATAGAA TAATTTTTTA ACATAGTTTT 1140
 GTTGTTTTGA ATTATAAAAA CTAAAG 1166

(2) INFORMATION FOR SEQ ID NO: 689:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1083 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 689:

40 AGCACTGAAG GATGGCTAGT TGTCATAGCA TATGCGGTCA TTGGTATAGT TATAACGAGC 60
 GTTCTTATA TGTGTCTAT TAAAATTTTT AACAAACAAG AACTAKAATT GTCGATTTTG 120
 GTGATGATAG TATTTGAAAT AATATTTAGA GCAGGTGATA AATCTTTACG ATTGTCATCT 180
 45 GTTCTTTTkG GTGTGGAATG AAATGTGGGG GATAAGTATA GGTGACATAT CTATATTGAT 240
 TTATTTGTTT TGAGGTGGTT ATGTTGTGTG GGAATTATTT CCTTTTAGAT AGCGGGGATT 300
 AGAGGATATA TGTTATTTAT AAGTATCATT TGATGATTGT ATAGGCTAAC GATTTCCCTCG 360
 50 GAAATATTTA AAAACCTCGA TCATGTAGCA TAACTGAAGT TTGTCACAAA AGTATAATGT 420
 GAAGTTTCGAC ACTTTTGGaT TCAGTTCAAA TACTTTGACC GAGGTAAATA CTATTTATTC 480

TGATACTGAG ATAATCATTa CATGGTCGTG ACCTTTAAAT AAAAGGCTGA CAATATAAGA 600
 CATAACGAGT ATACCTAGTG AATATGAAAT ATACTTCGCG TTTGTCAGTT CATTATGGAA 660
 5 ATAAGGCGTG ATTAACCATA ATCCAATATA GAATATTAAA ACACTGATAT ACATCATATT 720
 AATTTCAAAC AAGTCATTTa GTTTATTGTT ATTACTAAAA ACAATTGCAG CATTAAATCAC 780
 ACCTAAAGCG ATATTGATTA ATAGATGCGT ATACGATAAA CGGAAACCGA TAGATGTTAA 840
 10 TTTATGATTA ATATAATTTT CAGTAATGAT CCAATATACA CCGAAAAGAC TAATTAAAAT 900
 CATAAATTGG AATATATAAA TGTAACATAA ATGATCAATG CTAAATGATG ACGAAGCTAA 960
 15 ACCAACCAGT ACCTCGCCAr AGWTAtAATT GTTAGTAACG AAAAACGTCT ACTAAATGCA 1020
 TCATATTAAC AGGTnTAATA CAAGTATTTTc TGAAATGGAA TAAGnCTGTC GCTGCATGAT 1080
 ACG 1083

(2) INFORMATION FOR SEQ ID NO: 690:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 627 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 690:

30 TTAATCATCT GGATGTATTT AGTATTnAGA ATAATAAnAA AACGATCATG TTGTATtTGA 60
 GTAGCGATTG GTTTGCGGAA TTAGGCTTTA CTTTCTTTAA TTACCACTAT ACAGCAAAGT 120
 35 TGATTAAATC ATCCTATAAT TTGAAATGTC TACTATTAAA ATTGACATAT CGATACCTTG 180
 ATAATCAGCC TCTTAATGAC GCTGATayTA GAAAATTACA GGATATTATT AAAATCATTG 240
 CAAAAGAAGC AAGTATGGAT AAAAAGATTG CACAAAATCA ATATCGATAT GCGTATTATG 300
 40 GTGATTTGCG TGATGAGCTC GAATATATTT ATCAAAATGT AAATCAACGA TTGACATTAA 360
 AAAGTGTGCG TGATAAATTA TTTGTCTCAA AGTCAAATTT GTCATCACAA TTCCACTTAC 420
 TTATGGGCAT GGGTTTTTAA AAATATATTG ATACTTTGAA AATnGGTAAA TCGATTGAAA 480
 45 TTCTACTTAC TACTGATAGT ACTATTAGCA ACATAAGTGA nCATTTAGGT TTTAGTAGTA 540
 GCTCCACTTA CTCTAAAATG TTTAAAAGTT ATATGGATAT CACACCGAAT GAATATCGTA 600
 ATTTATCAAA ATATAATAAn TGTTTAC 627

(2) INFORMATION FOR SEQ ID NO: 691:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 641 base pairs

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 691:

	TTGAACGTAA TGCTAGCAAA TGACTTTGTG CCATAAAATA TTCTTCCCAT TTGATTCTTT	60
10	CCAAGATGTT CACCTTCCAT ACTTAAAATT TAGTAACATT TTCTAATAAT ATAAGATTAA	120
	TCACAAAAAA TAAATTTGTC AATTAAAATA ATCCATTATG TCGTGAAATA AGATTTCAGT	180
	TTATCAAAAG TTTTACTTCC AAAACCTTTT ACTTTTTTCA AATCGTCAAT TTCTTGAAAT	240
15	GCACCTTGTT GGTGCGATA TTCAACAATT GCATTAGCTT TAGCTTGCCC AACTCCAGGA	300
	ACAGACATCA ATTCTGATAC AGATGCCGTA TTTAAATTTA CTTTAGTATT ATTTGTGTTC	360
	CCaTTTTTTTT CGTGCACT GTTTACTTCA ATTTGTGGTT CAACATTCTT TTGTCCTTTA	420
20	TGAGGTATGA AAATCATTTT TTGATCTGTT AATTTTTTCAG ACAAATTAAT TTGACTTACA	480
	TCTGCATCCT CCAATAATTG TGCTTTATCA AGTAAATCAA CTACTCTATC CTTAGATGTC	540
	ATTTTATAAA CATTAGGATG TTTAACAGCA CCTTTTACAT CGACATATAC AGGACCCTTA	600
25	TTTTTGGAAT TATCTCCATC TTTGACCTGG ACATCTTCTA C	641

(2) INFORMATION FOR SEQ ID NO: 692:

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(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 631 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 692:

	TATTAAAGnA CTTGATGAAC CAAATCATAA AAAGnATAT ATGTTATTTG CAGCTGGCAT	60
40	TGTGTTnGCA ACTATTTTAC TTATTTTCGGC ACATTTTATAC AGCAGAAAGA GAGGTAACCA	120
	AGTTTGAGAA TCATAAAGTA TTTAACCATT TTAGTGATAA GCGTCGTTAT CTTAACCAGC	180
	TGTCAATCTT CCAGTTCTCA AGAATCAACT AAATCCGGCG AATTCAGAAT CGTACCAACA	240
45	ACTGTTGCAT TGACAATGAC ATTGGACAAA TTGGATTTAC CAATTGTCCG CAAACCCACG	300
	TCATATAAGA CATTGCCTAA TCGTTATAAA GATGTACCGG AAATTGGTCA ACCAATGGAG	360
50	CCGAATGTTG AAGCTGTAA AAAGTTAAAA CCAACACATG TTTTGAGTGT GTCAACGATT	420
	AAAGATGAAA TGCAACCATT TTACAAACAA TTAAATATGA AAGGCTACTT TTATGATTTT	480
	GATAGTTTAA AAGGGATGCA AAAGTCGATT ACACAATTAG GTGaTCAATT TAATCGTAAA	540

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GCAGCTAAAC AAAAGAAACA TCCCAAAGTA T

631

(2) INFORMATION FOR SEQ ID NO: 693:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1111 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 693:

15	AATTTAACTA TGTTTTCCAC ATTGTTTCAT GTCACGAAAA GGACAACGCG CGACTATAAG	60
	TATCAACTAT TTCCACAAGT TTTATTGGTG TTTTATTAT TCATCGATAC GCTTCATTTT	120
	CATCTCTCCA ACACAAAAAA GAAGCTAAGC AACTTATGTT GCCTAACTCC TCTATACTAT	180
20	CCATATTTTA CTATTATCCA TATTTCAATTG AATTATCTAA TGTGGCTTC TATTTTTTCA	240
	ATATTTCTAC CGTCAATGAC GTCATCATG CGATTTGTTT GTAATTTTTT ATTAAGTTCA	300
	AACGTATAAT AGCCGCCATC TTTCAATTATC ACTTTTATCT TACTATCTTT AGGAAACTTT	360
25	TTATACAGAT CAAAATTTTG AATTAAATAC TGTCTCAATT TAAAGTCGAG TTCTTTAAGT	420
	GAAATCTCTT CTTTATAAAT GTAGTGTACT CTACCGTACG TAGCAATACC GTCACCTTCA	480
	TCTCTCTTGA TTTGAAATCT TGGTGCGTTT ATATAATCAT AATAAGCGTC TTGATTTTTC	540
30	TTAGTGACAC CACCATATGA AAACACTGTG CCATTACGGT TTTCCGCTTC TTAAACAACA	600
	AATATGTCTA ATCCCGGATT TTTACGTGCT TTAAATCTTT CAATATCTTT ACCAAATATC	660
35	TGTACTCTTG TGAATTTTCT ATTTTATCA AAGATAAGGT AATGCTTGCC ACCTTTGCTA	720
	TAACGATAAC CAGTAACATT TTAAAGTTCC TTACTTGCGC CACTATAGTA ATCTCTTAAG	780
	TCAAAGATAT CTTTGTGCAC ATTTTCATAT TTTGCTTTAT GTTCACTCGC ATTTACAGTT	840
40	TGATGCAATG ACGTTATTGT TCCTGTTGCT AAAATACCTA ATGCTAAACT TGCTTTGCA	900
	ATTGCTGTCA TTTTCATAGT TGTATGCTCC ATTCGTAATT ATTAGATTG TTCGCTTACG	960
	TCTATTGAAT CATAAGCTT TATTATAGTT AGCGTATTTG ACCTTTCACA TTAAACCATG	1020
45	TTTAATAATC ATTGAATCAT TATTAAGTAA ATTAAGGATC TATAATGTTC GTTAAATAAA	1080
	CTGAnCCCGT TGTGCTTCAC ACCCGnTnGA T	1111

(2) INFORMATION FOR SEQ ID NO: 694:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 426 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 694:

5 TTATGGATGG ATTAAGAGGT CGTGTTGAAA AAATCAACGA TAACTCTGTT ATTGTTGACT 60
 TAACAATTAT GGAAAATTTT AATGACCTTG ATTTACCGGA AAAAAGTGT ATCAATCATA 120
 AACGATATAA GATTGTTGAA TAAGAAGGTA AGTTATAATG AATAAAATCT CGAAGGCTTT 180
 10 AACTTGGTTT ATTATAAGTT TCATTATATT TCATCTCATA TTATTTATTA TGTGGGGCGA 240
 ACACCAAGAA TACTGGTATT TATATACAGG TATAATGCTA ATTGCTGGTA TCAGTTATGT 300
 ATTTTATCAA AGAGATATTG AATCTAAGCG GTTGCTTACA TCAATTGGTG TTGGTATTAT 360
 15 TACGGCAATT ATTTTAATTA TGCTTCAACT TTTATKCTCA CTTATAACTT CTAATTTAAG 420
 TTATAG 426

(2) INFORMATION FOR SEQ ID NO: 695:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 737 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 25 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 695:

30 AAAAGGGGnG TAAGGTTTAG CTCAAGTACG AGAAGTCTTT GGTGATGAAG CAATTGATGA 60
 AAATGGTGAG ATGAATCGTC GTTATATGGG TGATCTAGTG TTTAATCATC CAGAAAAACG 120
 35 CTTAGAATTA AATGCTATCA TACATCCTAT CGTGCGAGAT ATTATGGAAG AAGAAAAGCA 180
 AGAATATTTA AAACAAGGAT ATAATGTAAT CATGGATATT CCATTATTAT TTGAAAATGA 240
 ATTGGAAAAT GCAGTAGACG AaGTGTGGGT TGTATACACT TCTGAAAGTA TACAAATGGA 300
 40 TCGTTTAATG CAACGTAATA ATTTGTCATT AGAAGATGCG AAAGCACGTG TCTATAGCCA 360
 AATTTCTATT GATAAAAAAA GCCGAATGGC CGATCATGTT ATCGATAATT TAGGGGATAA 420
 ACTTGAATTA AAACAAAACC TTGAGAGATT GTTAGAAGAA GAAGGTATA TTGAAAaGCC 480
 45 GAATTACGGA GAAGAAGATT AATATTACAC TATAAATAAG TCATTACTTT ACGTACGCGT 540
 TGATGTATGT AAGTAATGAC TATTTTTTAT AAAAAAGATA AATAAATCAA CGGAAAACGC 600
 TTTCAAATTT CATATAATAT GCTATACTAA TTCCATAAAG TATAACACAT AAAGATCAAG 660
 50 GGGTGCTTTT AATGTCAACG AATATTGCAA TTAATGGTAT GGGTAGAATT GGAAGAATGG 720
 TATTACGTAT TGCATTA 737

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 432 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 696:

AACGATAAGA ACAAAGATA TATTACAAAG CGTTTATTTA AAACGTTATT TATTACGCGC 60
 GATGATGGCA GGATTATTAT TCGGGATTAT TACGGTCTTC GTATTATCAG TTAAAGCAAC 120
 ACACGAACCA GATTTACCGC CAGgCATTGT GAATATGGCC AGTGCCATTA CATTGAGCTT 180
 TCGGTTAGTA CTCATTTTAT TTACAAACTC CGAACTACTA ACCAGTAACT TCATGTACTT 240
 TACTGTAGGC CTGTATTmTA AAGTAATTAA ACCAACTAGA GTATTGaAAA TATTTTTTATT 300
 ATGCTTTGCA GGAAATATTT TAGGTGCTGC TATTTyATTT AGTTTCATGC GTTTTTCAAA 360
 TGTAATGACG CCAGATAwGt TAAAyCAGTT ATCAGCAGTT ATAGAGCATA AAACGTTGTC 420
 TACTGGTTTT GT 432

(2) INFORMATION FOR SEQ ID NO: 697:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 782 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 697:

CTTTTATACG AAAGTTAAmA TCAAATATAA CATTAATGTT TGATGGGGAT TTTGCGGGTA 60
 GTGAmGCAAC ACTTAAAACA GGTCAAAATT TGTTACAGCA AGGGCTAAAT GTATTTGTTA 120
 TACAATTGCC ATCAGGCATG GATCCGGATG AATACATTGG TAAGTATGGC AACGATGCAT 180
 TTACTGCTTT TGTAaaaaAT GACAAAAAGT CATTTGCACA TTATAAAGTG AGTATATTAA 240
 AAGATGAAAT TGCACATAAT GACCTTTCAT ATGAACGTTA TTTGAAAGAA CTAAGTCATG 300
 ATATTTTCGCT TATGAAATCA TCGATTTTGC AACAAAAGGC TTAAATGAT GTTGCAACCAT 360
 TTTTCAATGT TAGTCCTGAG CAATTAGCTA ACGAAATACA ATTCAATCAA GCACCAGCCA 420
 ATTATTATCC AGAAGATGAG TATGGCGGTT ACATTGAACC TGAGCCAATT GGTATGGCAC 480
 AATTTGACAA TTTGAGCCGT CAAGAAAAAG CGGACnAGCA TTTTAAAAAC ATTTAATGAG 540
 AGATAAAGAT ACATTTTTTAA ATTATTATGA AAGTGTTGAT AAGGATAACT TCACAAATCA 600

TATCAGTGAT GCTGTGCAGT ATGTTAATTC AAATGAGTTG AGAGAAACAC TAATTAGCTT 720
 AGAACAATAT AATTTGAATG ACGAACCATA TGAAAATGAA ATTGATGATT ATGTCAATGT 780
 5 TA 782

(2) INFORMATION FOR SEQ ID NO: 698:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 714 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 698:

AAATCATTGG CAAAATATAC GAATTGCATT TAAATCGTCA ATTTACATAT ATTTTTGCGT 60
 20 AGTAATCAAT CGTTATCATT GTTATTTATC GTTACATTAT TTCGAGTATC AGTATGTATT 120
 TCGGGCTTCG TTTGATAACG ACATTTCTTT GTGACATCGC TTCATCAGTG TAACAACAAA 180
 TACAATGATT TCGTGATGTT AGTTACCCAT TTTATGTGTT GCATAAAATA TGTTGTTATA 240
 25 AAACATTTTA AATCATTTTA TATAACAAT CTATATATTT TTGGCATTTC CAAAATATCA 300
 CTTGTTATAT TAAAAACCGA CAAGACATTT TATCTTATCG GTTGAAATTT GTTATTGTTA 360
 TTTGTAATGT TTTTAGGTTT CTTTTTAATA TAATATATTT CAGTGAAAAT ACATGATTGA 420
 30 TTGTGATTTT ACTGAAACAT GGTTAATTGC GTTGTGATG AATAACTTTA GCATAAATAT 480
 AGGAAGTTAT TTTGTACATC GCCATATATA GAAACGAAAT TATAATGACA GCTAGTACGT 540
 AACTTGTTAA AAATATATGA TGGTTATTAA TACCTATCAT ATTTAGTAAC GTATATACAA 600
 35 TGTTACTAGA AATTAATGTG TGAATCAGTG CTACTGTTAT TGGTATtGCG AACAGAAAG 660
 TCATTTGATT TCGTGTTATC TTTGCTATTC TTCCATTATC TAAACCAAGT TTTT 714

(2) INFORMATION FOR SEQ ID NO: 699:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 361 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 699:

ACTGAGAGCA ATAATTTAGT AACTTCTACT CAAGGAATTA TTAAAGAAGC ATTGCATAAA 60
 50 TTGGGATTTG nnTTTAATTA AAGAACCTTT AAGAATGTTA CAAGTTCGTA TCCCTGTACG 120

TGGACCAACA AAAGGGGGCG TGC GTTTCCA CCCAGATGTT GATGAAGAAG AAGTAAAAGC 240
ATTATCAATG TGGATGACTT TGAAATGTGG CATTGTGAAA CTTACCATAC GGTGGTGGTT 300
5 AAGGGTGGTG ATCGTTTGTG GATCCACGTC AAAAGAGCAT TCCATGAAGT TGGAACGTTT 360
A 361

(2) INFORMATION FOR SEQ ID NO: 700:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 943 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 700:

20 GTCCTTAATT GGTATCCACC TTTAGCACCG CGTACACTTC GAATTAACCC CGCATTCTT 60
AAAGGACCTA CAAGCTGTTT TAAATATAAA TCACTCAAAT TATTTTCTTC AGCAATTGAC 120
TTTAATGATA TACATCCTTG CCCCTCTTTT TTAGCAAGAG AAATCATCAA TGTAAGTCCA 180
25 TATCTCCCTT TAGTAGAAAT TTTCATTGTA TAACCTCACT TAATTCGAAT ATTGATATTC 240
CCATTTTAGC ATTTTTTGAG TTAAGATAGT ATAAGAAAGG TGTGACAAAT GTGAGTACAG 300
AACCATTAGC ATCGAGAATG CGCCCCAAAA ATATAGATGA AATCATTTC CAACAACATT 360
30 TAGTTGGACC AAGAGGCATT ATCAGAAGAA TGGTTGATAC AAAAAAATTA ACTTCAATGA 420
TTTTTTATGG TCCACCTGGT ATAGGCAAAA CAAGTATTGC CAAAGCAATT TCGGGCAGTA 480
CGCAATATAA ATTCAGACAA TTGAATGCTG TAACTAACAC TAAAAAAGAT ATGCAACTTG 540
35 TTGTTGAAGA AGCTAAAATG TCTGGTCAAG TTATCTTGTT ATTAGATGAA ATACATCGAC 600
TAGATAAAGC TAAACAAGAC TTTTATTAC CTCATTTAGA AAATGGCAAA ATCGTCTTGA 660
TCGGTGCTAC AACTTCAAAT CCTTATCATG CTATCAATCC AGCGATTCGT TCAAGAGCGC 720
40 AAATTTTCGA GTTATATCCT TTAAATGACG AaGATGTGCG CCAAGCGTTA ACTCGTGCAA 780
TAGAAGATGA TGAGAATGGT TTGAAAmCAT ATCaACCCAA AATTGATGAA GATGCCATGA 840
45 CCTACTTTTC TACACAAAGC CAAGGTGATG TTCGTAGTGC GTTAAATGCA TTGGAATTAG 900
CTGTATTAAG CGCAGATAAT GACAAAGACG GTTATCGACA TGT 943

(2) INFORMATION FOR SEQ ID NO: 701:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 445 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 701:

5 CATTAAGTGA AGTTGTTGAT ACACCCATGC ATCAAGTCAA TGTTTCTGTT GATTTAGATA 60
 CAGAAAGCTT ATTAGGCTTT AAAACAATTA AAACAAATGC GGAAGGTCAA CAAGAAATTG 120
 TCTTTGTAGA TGGTCCAGTT ATTAAAGCTA TGAAAGAGGG GCATATTTTA TATATTGATG 180
 10 AAATAAATAT GGCTAAACCT GAAACATTGC CTGTATTAAA TGGGGTCTTA GATTATCGTC 240
 GTCAAATTAC GAATCCATAC ACTGGTGAAG TAATCAAAGC TGTACCAGGA TTTAACGTTA 300
 TAGCAGCGAT AAATGAAGGT TATGTTGGtA CTTTGCCAAT GAATGAAGCA CTAAAAAAaT 360
 15 CGCyTTGTTG TtATTCACGT kGATTATaTT GATGGGGaCa TTTAAAAAAT GTGAnTAAGG 420
 AGCAAGGTTT ATTACAAGAT GTTAA 445

(2) INFORMATION FOR SEQ ID NO: 702:

20 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 752 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 25 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 702:

30 TGCAAGATAA ACAAATTTGT CATTGTTTTG GTTGTAaaaa AGGTGGCAAT GTTTTTCAAT 60
 TTAActAAGA AATTAAAGAC ATATCATTTG TTGAAGCGGT TAAAGAATTA GGTGATAGas 120
 TTAATGTTGC TGTagATATT GAGGCAACAC AATCTAACTC AAATGTTCAA ATTGCTTCKG 180
 35 AyGATTTACA AATGATTGAA ATGCATGAGT TAATACAAGA ATTTTATTAT TACGCTTTAA 240
 CAAAGACAGT CGAAGGCGAA CAAGCATTAA CGTACTTACA AGAACGTGGT TTTACAGATG 300
 CGCTTATTAA AGAGCGAGGC ATTGGCTTTG CACCCGATAG CTCACATTTT TGTcATGATT 360
 40 TTCTTCaaaa AAAGGGTTAC GATATTGAAT TAGCATATGA AGCCGGATTA TTATCACGTA 420
 ACGAAGAAAA TTTCAGTTAT TACGATAGAT TTCGAAATCG TATTATGTTT CCTTTGAAAA 480
 ATGCGCAAGG AAGAATTGTT GGATATTcAG GTCGAACATA TACCGGTCAA GAACCAAAAT 540
 45 ACTTAAATAG TCCTGAAACA CCTATCTTTC AAAAAAGAAA GTTGTTATAC AACTTAGATA 600
 AAGCGCGTAA ATCAATTAGA AAATTAGATG AAATCGTaTT ACTAGAAGGT TTTATGGATG 660
 TTATAAAATC TGATACTGCT GGCTTGAAAA ACGTTGTTGC AACAATGGGT ACACAGTTGT 720
 50 CAGATGAACA TATTACTTTT ATACGAAAGT TA 752

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 830 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 703:

nCGTTTTTGT nAAACnGCTT ATATGTATAA CTTTTCCCAA TTTATCATAA GTTTTGATAG 60
 AAGGAGTTGG ATCGCTAAAG AAAATATCTC TAAAGATATC ATCTTCAATG ATAGGAATAT 120
 TATGTCTtTC GctATAAGTA ATTATATTTT TCTTTTGCTC ATTCGTTAAA GAACGACCTG 180
 TCGGGTTATT AAACCTAGGT TCTATATAAA TCGCTTTATT TTTAAAATTA ATAAATCTAT 240
 CAATGATGGT ATCAATTTCA TTAATTTGAT TATAAGGAAC ATCAATATGT CTAAAATTCA 300
 ATTGCTCAAA AACATTTGTA GAGTGAATAT ATGATGGTGT ATTCGAAATT ATTATGGCAT 360
 CTTGACCTAA AAACCCAATA GATAAAAGTT GAATGGCATG TAAAGCGCCT GAAGTGATCA 420
 TTACATTTTC TCTACCTACA TTTATACCTT GCTTTGACAT TCGTTCAACG ATAATATCTC 480
 TTAAC TTGAT ATAACCATAG CCATTATTAT AACCAAAAGA TAAGTCTTCA ATATGACTGG 540
 CTGTATTAGA CATGGCTTTT TTCAATTGAA TATGTGGCAT TAACGATATA CCCAATTCAC 600
 CTTTACTTAT ATGTATATAC GAATCATCTG TCTCAATTTT ATTAATTAAT TGCACCGTAT 660
 ACTGACTTCT TTGTTGAGAG GACCATAACA TCATTTTCAGA CCACTTATTT GTAATATGTG 720
 CTTCAATTCAA ATAGTCATTA ACATATGkTC CACTACCTAC TTTAGTATAG ATAAATCCTT 780
 CAGCTTCTAA TAACTCAATA CTTTTAATAA TCGTTACTCT ATTTACGTTG 830

(2) INFORMATION FOR SEQ ID NO: 704:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 659 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 704:

AGTGGTGTG GAAAAGCTAT TATGAAATTA TTACGTGAAC AACAAGTTTA ATAAAAAAG 60
 AGGGGTCAAA TATGAAAGGA TTAATTATTA TTGGCAGTGC ACAAGTGAAT TCACATACAA 120
 GTGCACTAGC AAGATACTTA ACTGAGCATT TTA AACACA TGATATTGAA GCGGAAATAT 180
 TCGATTTAGC AGAAAAACCG TTAAATCAAT TAGATTTTTC AGGAACAACA CCGTCTATTG 240

TATTAGGAAC GCCAAACTAT CATGGTTCAT ATTCTGGAAT ATTGAAAAAT GCATTAGATC 360
 ATCTAAATAT GGATTATTTT AAAATGAAAC CTGTAGGCTT AATAGGAAAT AGTGGTGGTA 420
 5 TTGTTAGTTC AGAGCCATTG TCACATTTAA GAGTAATCGT CAGAAGTTTA CTAGGCATTG 480
 CTGTACCAAC TCAAATAGCA ACACATGATT CTGATTTTGC TAAAAATGAA GATGGTTCAT 540
 ATTACTTAAA TGATAGTGAA TTCCAATTAC GAGCAAGATT ATTTGTGCGAT CAAATTGTAT 600
 10 CTTTTGTGAA TAATAGTCCA TATGAACATT TAAATAATA TTAAnAAATA TGTAAATnT 659

(2) INFORMATION FOR SEQ ID NO: 705:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 705:

nCACCATATA GTAACGGCA CCAACTACAT TACCGTCTTT TAAAAAGATT TTTTATAGT 60
 25 TATTATCAAC ACTATTAAAT ATTTCAATAC CTTTAATTTC TGCATTTTCT ACAATTTGAC 120
 CAGCACTATA CAAGTCACAC CCAGAACTT TTAATGACGT AAATGTTGTT GATCCCTTGT 180
 ATCCGTTCTG TTCTTTATTT GTTAAATGAT CAGCTAATAC TTTACCTTGT TCATATAGTG 240
 30 GTGCAACGAG TCCATAAACT TTGCCGTTAT GTCTGCACAT TCACCAACTG CATATACATT 300
 GCTATCACTT GTTTGCATCA CATCATTGAC AACAATACCA CGATTACATC TAGACCTGAT 360
 CTTGGCACTC CTGGGAAGGC GGAACCACTG CATACTACTA 400

(2) INFORMATION FOR SEQ ID NO: 706:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 380 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 706:

TTAAAAATAC AGCTACAGGT AATTTTAAATG ATTTTTCATC AATATCAAAT TTGGGATTAT 60
 GGTGTGGCGC TGTAATACCT TTAACCAGTC AGAAAGAATG CACCTGGTCG TACTTTCAAA 120
 50 TAATGTGAAA AATCTTCTCC AATCATCATT AAATCTGATT CATTAAAGCG TACATGTAAG 180
 TCATTTGTTG CTTCTTTAAT AACTTGGATA TGCTTTCTCG TTTATTATGG ACAGGCAAAT 240

GCTTAATCCA TTTTGTCCAT ACATGATTCT GTATATCTGA AATCGAAAGT TCTnACTGTA 360
 CCTTTACAAA ATGCCTTGnn 380

(2) INFORMATION FOR SEQ ID NO: 707:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 707:

CAnAAAGGAT CAAAGTGATC GGTATAGTGA TAATTAGCTC CAAAGAAAGA ATATTCTAAA 60
 TCAAATCCAT ACCAAGCAGA AAGTATTAGC GAATATCAAT TTAAATGGTA CCGATTCAAA 120
 TAAAGAAACA CGACATATAG AATTTTTACT TGATGATTTT AGTGAATCAT ATGAACCAGG 180
 AGATTGTATA GTAGCATTAC CGCAAAACGA CCCTGAATTG GTTGAAAAAC TAATATCCAT 240
 GTTAGGTTGG GATCCGCAAT CTCCGGTGCC AATTAATGAT CATGGTGATA CAGTTCCTAT 300
 TGTGAAGCA CTAACATCAC ATTTTGAATT TACTAAATTA ACATTGCCAT TATTGAAAAA 360
 TGCAGATATC TATTTTGACA ATGAAGAATT ATCTGAnCGT 400

(2) INFORMATION FOR SEQ ID NO: 708:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 447 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 708:

TAATGCTGGT ACGGGTCATG CAGCATTATG TGAGTTGAAC TACACAGTTT TACAACCTGA 60
 TGGTTCTATC GACATCGAAA AAGCGAAAGT GATTAACGAA GAGTTTGAGA TTTCAAAACA 120
 ATTCTGGGGT CACTTAGTGA AAAGCGGTAG CATCGAGAAC CCAAGAGAAT TTATCAATCC 180
 ATTACCACAC ATCAGTTATG TTAGAGGTAA AAACAATGTT AAATTCTTAA AAGATCGTTA 240
 CGAAGCGATG AAAGCTTTCC CTATGTTTGA TAATATCGAA TATACTGAAG ACATCGAAGT 300
 AATGAAAAAA TGGATTCCAT TGATGATGAA AGGCCGTGAA GATAACCCTG GTATCATGGc 360
 GGCAAGTAAA ATTGACGArG GTmCAGATGt AAmCTyCGGT GAATTAACAC GTAAATGGC 420
 TAAAAGCATT GAAGCACATC CAAATGC 447

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1448 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 709:

10	GTGTCTACCT GTTTTTGGTT TTCAATTGTT AACTTTTCTT TTTGAATAGT AGTATTCGAT	60
	AATTCCTTAT CGCTTATAAA ATCATCTAGT GGATGGCTTT CTTTGAAACT TTTATTTTCA	120
15	GTCATCAATC ATCTCTCCAA TAGTTGCTAT TTTACATCAA TCTTGATGAT GTTTTTGATG	180
	TAACTTATTT AATTCCATTT CAATATCTAA ACGTTCATAA TCATCTTCGT TGAGACGCTT	240
	TAAATCAGCG ATTAATGTTT GTTTGACCTC ATCCAAAGTA ATTCGTGTTT GTTCTAACTT	300
20	TTGCTGTTCA TTAATTGATT TTTTGGGCAT TTTTGCTAGA CGTGTATATG CATCAACCAA	360
	ATTTAAAGCA TTATCAATAT GAGAATAAAA AAAGCCTTCA ACTTTATAAA ATGATGCAGG	420
	TCTCTGTCTA ACTGTCGTAT AAATAGAACG TGAAATTTGG TATATATCAT TAATCTGCCT	480
25	AAAATCTTTA ATTGATCTTA TATTGACATA CGTTTTTAAA ATACCTCTAA GTTTTTGGTG	540
	TGTATGATTT AACTGATTTT GAATATAGCG ATAGTCTTTT CTAGTCAAAC CAATTCGTT	600
	TAAATATTTG CGTGAAGTGA GTTTTTGTAT CGGTAGGTAT GTCATTAAAA AGCCAACAAT	660
30	ACCAATAGAC ATATCAATTA AAAAAGATAC ATCAAGTGCA ATCATCCCAA ATATGCTTGT	720
	TAAAAACGCT ACAGGAATTC CCACTAACAC CCCAAATATA TGAGAAATAT TATATCTCAC	780
35	TGTCATCTTC CTTTATTTAG CATTTTATAT TGATCGAAAA TCCGATAATT TTTGATTTAG	840
	TTCTAACTCT TCAAGTTGAT GGCTTGTTAC ATTTGATGCT GGTGAGGCAC CTTCAATTAC	900
	ACCTTGAATA AATCTCTCTA TATCTGCGTC ATCCCCTTGT GCATATATCT CTACATAGTC	960
40	ATCTACATTT TGAACAGTAC CGACAATGTT ATAGTTCATT GCAATGCGTT GTGTAAAATA	1020
	TCTAAATCCG ACGCCTTGAA CGCGTCCGAA TACTTGTAATA TGTATATGtC TCaTTTTTAC	1080
	CACCTCATAA TGTTATTATA CGTAGTTTTA CTTAAAAAAA CTAATAATTA CTATAGTTAC	1140
45	TACTTTGTTT GTTTCAGTTC GTCAAACTTG ATTTTCAGAG GATAAAGGTA TAAAAATAAG	1200
	TATAGAGTTT TTGAAGTATG GAAGGGGTCT TTAATAATGT GGACAGTTAC CAAAATTAGA	1260
	GCCGATTATG AGGGATGGTG GTTATTCAGT GACTGGCCAG AAAACATTGT TGAAAAATAT	1320
50	CAATATCAAG ATTTTGATGA CATGTTTAAG CACTATCAAC AATTGATTAA TCAATGTAAA	1380
	GTTCAAGTTCG ATAACATATGT CACAGGCAAA TATAATATTT ATGCATTTTA TAATAATTGT	1440

(2) INFORMATION FOR SEQ ID NO: 710:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 519 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 710:

GCTGnAAAAT ATGTTAGAAG CAGATGCATG GGCAAAGCTG GGGTCCTTAT TTATTGTCAG 60
 GTAAAGATGT CTTCAATTCA ACTATTGGAA TATATGGTAT GGGAGATATT GGTAAAGCTT 120
 TTGCAAGAAG GTTGCAAGGG TTTAATACTA ATATTCTTTA TCATAATCGA TCAAGACATA 180
 AAGATGCAGA GGCGGACTTT AATGCAACAT ATGTTTCTTT TGAAACGTTG TTAGCAGAAA 240
 GTGATTTTAT CATCTGTACA GCGCCACTTA CAAAAGAAAC ACATCATAAA TTTAATGCTG 300
 AAGCATTTGA ACAAATGAAA AATGATGCAA TTTTATTAA TATCGGTAGA GGACAAATTG 360
 TAGATGAAAC AGCATTATC GATGCACTAG ACAATAAGA AATTTTAGCA TGTGGTTTAG 420
 ATGTATTAGC AAATGaACCG ATTGATCaTA CACATCCATT aATGGGaCGT GaTAATGtTC 480
 TGaTTaCACC aCACATTGGG TAGGCGCATT CAGTTAAcN 519

(2) INFORMATION FOR SEQ ID NO: 711:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1349 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 711:

CTATTACAGG TGGCGAACCA ATGTTTTCTA AAAAGTCTAT TAGAAATGTT GTTAAACCTC 60
 TATTAAAGTA TGCACATCAT CGAGGTATAT ATACACAAAT GAATTCAAAC CTAACATTGC 120
 CTCAAGATCG TTATTTAGAT ATTGCTGAAT ATATCGATGT TATGCATATC TCACACAAC 180
 GGGGAACAAC TGATGAATTC GCAAATGTTG GCTTTGGCGC AATGAAGAAG CAACCACCGT 240
 TAAAAGCTAA GTTAAATTA TATGAACAAA TGATTTGAA TGCACGTACA TTATCAGAAC 300
 AAGGAATGTT TGTATCTGCG GAAACAATGC TCAATCAAAG TACGCTACCA CATTTACGAA 360
 AAATACATCA AGAAGTCGTT CATGATATGA AATGTAGCAG ACACGAGATT CACCCTATGT 420
 ATCCAGCTGA CTTTGCAAGT CAATTAAATG TGTAACTCT AGCGGAAATG AAAAAGACAA 480

TGTTCCTCATG CTTAAAGGAT GATGAAGATC AAAAGTTACT ATCACGTTTA AGAAATGCTA 600
 AAAATGTAAC GACTAGAAAT GACCCGGATG GCCGTAGTCG TTTAAATGTC AATGTATTTA 660
 5 CAGGTAATGT AATCGTAACT GATTTCCGAG ATGAAACAGG TACAATTTCTG AATATACAAA 720
 AAGATAAATT AACAGATGTA TTTGATAAAT GGTATCCTC TGATCTTGCT AAATCATTAA 780
 ATTGTCATTG TTCCGAGTTT AGTTGTTTAG GGCCAAATGT TCTTGTTAAA AATATGTACT 840
 10 ATCCGAATAT GGATTTTAAA GATAATGAGC GTCATATGCA CAAACAACCA CAAATTATAC 900
 AATTTTAAAA ACTCTTAATT ATGCGGAGAA GCACTTTATC GATAAGTAGT CTCCGCATAT 960
 TTTAATGCTA TTATAAAATA AAAACAATT AATTGCTGGC AGTACTCTAC TTAAATAATA 1020
 15 AAGGGCATT T AATAGGACTA ATAGTCTATA ATAAAAGGGG TAAATTTTAA CTAAAAGCAT 1080
 AAACGTGCAT AATCAAAAAG ACAGATTGTA GGTGGAATAT TCGAaCATAA CAGTTCAATT 1140
 20 CATCCTTAAC AATCTGTCTT TATATTTTTT GTCTCTAATA TGTTGCACTT GAGCTAAATA 1200
 TTCAATTGTT gTTTACTTtC AaTGCGaCGt GCTTttCTtC GTtCAaCaCG TgwGGTGCTG 1260
 TATCATAAAA CCATTTTTTCA ACATCATCTT CTGGATATAC ACCAGGTACA TGTTTAGGTT 1320
 25 GCCTTCATCA TCTAACGCAA CAAATGTAA 1349

(2) INFORMATION FOR SEQ ID NO: 712:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 377 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 712:

GAAATTAAAA AAGCAATTGG ACAAGATGCA ACAGTGTCAT TGTTTGATGA ATTTGATAAA 60
 40 AAATTATACA CTTACGGCGA TAACTGGGGT CGTGGTGAG AAGTATTATA TCAAGCATT T 120
 GGTTTGAAAA TGCAACCAGA ACAACAAAAG TTAAGTCCA AAAnCAGGTn GGCCTGAATG 180
 GAACCAGGAG GAAnTTGAAA ATATGCTGGG GATTACATTG TGAGTACAAG TGAAGGTAAA 240
 45 CCTACACCAG GATACGAATC AACAAACATG TGGAAGAATT TGAAAGCTAC TAAAGAAGGA 300
 CATATTGTTA AAGTTGATGC TGGTACATAC TGGTACAACG TCCTTATACA TTAGATTTC 360
 TCGGTAAAGA TTAAAAA 377

(2) INFORMATION FOR SEQ ID NO: 713:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 528 base pairs

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 713:

	AATGAAnCGA AAAATGACTA TAAAAAGTTT AAAGTGTTTT CACTTATTTT AACACTTGTC	60
10	ATTGTCATTT TAGCAATTAT AAGATTTGTT CATAAAATGA TGTAATTAGA GTGAGACATT	120
	GTTTTATGTC TCAGGATCCA GTTATTCATT ATATCTACAA TATTTACGAT TATATAAATA	180
	ACCCGAGATT TTAGTATGAT TCATTtCACT AAAATCTCGG GTTTCTATTT GATAATTTTT	240
15	AATGGGATAT GGCATGTATA CGTTCTTGCC TTTTATCTCA TTTCCAATGA TTAATCTGGA	300
	TATTGTTCTA AAAATGCTTT CGCTTCTTTA TTAAGTGTGTT TAAAATCAAT ACCTTGTTGC	360
	ATCGCTGCAA AGACACATCC ACAATAACAC TGCCTAAAGA TATTATAGTC ATTACACATT	420
20	TCTATGGaAC GCTCATAACC TTTACTTTTC yTAAAATCAC TTGGcAAATA GTTCACaTCG	480
	TATATTTTTT GGACATCCAT ACCAAGTTCA TTGATTAATT GTGCGTTC	528

25

(2) INFORMATION FOR SEQ ID NO: 714:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 731 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 714:

35	TTTAATGGCA TGAAGTCACA GTATATAAAG AATCTGGTGT GACAATCAGT ATGACTAAGT	60
	ATATAAAAAA AGAGCAGGTG cGAAATAATG GCGAAAGAGT CGAAATCAGC TAATGAAATT	120
	TCACCTGAGC AAATTAACCA ATGGATTAAA GAACACCAAG AAAATAAGAA TACAGATGCA	180
40	CAGGATAAGT TAGTTAAACA TTACCAAAAA CTAATTGAGT CATTGGCATA TAAATATTCT	240
	AAAGGACAAT CACATCACGA AGATTTAGTT CAAGTTGGTA TGGTTGGTTT AATAGGTGCC	300
	ATAAATAGAT TCGATATGTC CTTTGAACGG AAGTTTGAAG CCTTTTTAGT ACCTACTGTA	360
45	ATCGGTGAAA TCAAAAGATA TCTACGAGAT AAAACTTGGA GTGTACATGT TCCGAGACGT	420
	ATTAAAGAAA TTGGGCCAAG AATCAAAAAA GTGAGCGATG AACTAACCGC TGaATTaGaG	480
50	cGTTcAcYtT CTATcAGTGA AATAGCTGAT CGATTAGAAG TCTCAGAAGA AGAAGTGTTA	540
	GAAGCAATGG AAATGGGACA AAGTTATAAT GCGTTAAGTG TTGATCATTC CATTGAAGCT	600
	GATAAAGATG GTTCAACTGT TACGCTATTA GATATTATGG GGCAACAAGA TGACChTTAT	660

55

CGAGAAATCA T

731

(2) INFORMATION FOR SEQ ID NO: 715:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 830 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 715:

TTTTAGrGGa AAGCGaATTA GtCaTATwCg CaGCAGATwG aATGATTGaA AAmGaAATTG 60
 aATTCGATTCC AATTGTAAAG AAAAAGATA ATCAAAGTA TGAAGTAATT GGAAGAATTT 120
 CCAAAACAAC AATAGCTAAG TTATTAGTAG CATTATATAA AGAATAGGTG AGAAGTAATG 180
 GAAAAAATTA AAATTATCGT AGCTTCAGAT TCTATAGGTG AAACGGCAGA GTTAGTTGCT 240
 AGGGCAGGTA TTTCACAATT CAATCCTAAG CAATGTAAAA ATGAATTATT AAGATATCCA 300
 TATATTGAAT CTTTTGAAGA TGTTGATGAA GTGATTCAAG TTGCAAAAGA TACAAATGCT 360
 ATCATTGTTT ATACACTTAT TAAACCTGAA ATGAAGCAAT ATATGAGTGA GAAAGTAGCA 420
 GAATTCCAAT TGAAGTCTGT CGATATCATG GGGCCATTAA TGGATTTATT ATCTGCTTCG 480
 GTTGAAGAAA AACCTTATAA TGAGCCAGGT ATCGTTCATA GATTAGATGA TGCATATTTT 540
 AAGAAAATTG ATGCGATAGA GTTTGCAGTT AAATATGATG ATGGTAAAGA TCCTAAAGGA 600
 TTACCTAAAG CTGATATTGT TTTACTTGGT ATTTGAGAA CTTCAAAGAC ACCATTATCT 660
 CAGTATTTAG CGCATAAGAG TTACAAAGTT ATGAATGTAC CGATTGTACC AGAAaGTGAC 720
 ACCGCCAGAT GGCTTATATg GATATTAATC CAAAGAAATG TATCGCACTT AAAATAAGTG 780
 AAGAnAAATT AAATCGCATT AGAnAAGAGC GACTAAAACA ATTAnGACTA 830

(2) INFORMATION FOR SEQ ID NO: 716:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1159 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 716:

nGAAGAACAA GTTTAnCATC TAAATGCCCG TTAAAACTA CAACTACTTG ACGATGTAA 60
 ATCAGTGTTT AAnTCTCAA TGACGCAAAA TAGTGATTTT AATGAAGAAA AGAAAGTGTC 120

	AGAACGTATA	AAAAAATACT	TTAATAAGCA	ACTCACTGAG	CAAATTGCAC	CAATCGTTCA	240
	ACAAATTAGCA	GATTTACATG	TCATTATTAA	TCCTCAGTTT	AACTTTGAAT	CAGCTAATAT	300
5	AGAGCAACCA	TTATTGCACA	TCGATTTCAA	CGATATGCTA	AATGCATTGC	CTAAACAATT	360
	AACAAAACGT	AAAATTTTGA	ATCCAAATGG	GCAAAGAGAT	ATACATGAAT	CAATTTGTCA	420
	AAGTACGTTA	GGATTATTAC	AACCACAAAT	GGGATTATTG	AGGCAACAGC	TTGAATTATA	480
10	TGTAAAGCAA	ATGGCTGTAG	AAGCTGAATC	GCAATTTGAA	AGTTTTGAAG	CTAATATTCA	540
	AACGCAAATA	AACGATTTAT	TAGCATTTGA	TTTAGATACA	ACACTTATCA	ATCAATTGAA	600
	AGATAAACAT	CAACAACTGA	AAACTATTTT	ATATTAAGAA	AGAAGGAACG	TTTTAAATGC	660
15	CTAATAAAAT	ATTACTTGTA	GATGGTATGG	CGCTATTATT	TAGACATTTT	TATGCTACAA	720
	GTCTTCATAA	ACAATTTATG	TACAATTCAC	AAGGTGAACC	TACAAATGGA	ATACAAGGAT	780
	TTGTGCGTCA	TATCTTTTCG	GCAATACATG	AAATACGCCC	TACACATGTA	GCTGTATGTT	840
20	GGGATATGGG	ACAATCAACT	TTTAGAAATG	ATATGTTTGA	tGGTTATAAG	CAAAakCGTT	900
	CTGCACCACC	AGAAGAATTG	ATACCACAAT	TTGATTATGT	TAAAGAAATT	TCAGAGCAAT	960
25	TTGGCTTTGT	AAATATTGGC	GTTAAAAACT	ATGAAGCGGA	TGATGTTATA	GGTACATTAG	1020
	CACAACAATA	TTCAACTGAT	AACGATGTCT	ATATTATTAC	GGGCGACAAA	GATTTACTGC	1080
	AATGTATTAA	TGACAATGTT	GAAGTTGGCT	AATTAAAAAA	GGTTTAACAT	TTATAATAGA	1140
30	TATnCATTA	ATCGTTTTn					1159

(2) INFORMATION FOR SEQ ID NO: 717:

(i) SEQUENCE CHARACTERISTICS:

- | | |
|----|----------------------------|
| 35 | (A) LENGTH: 574 base pairs |
| | (B) TYPE: nucleic acid |
| | (C) STRANDEDNESS: double |
| | (D) TOPOLOGY: linear |

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 717:

	GATTTAATCA	ATGCAGTTGC	AGAGCAAGCT	GATTTAACTA	AAAAGAAGC	TGGTTCAGCA	60
45	GTAGATGCTG	TATTCGAATC	AATCCAAAAC	TCATTGCTA	AAGGTGAAAA	AGTACAATTA	120
	ATTGGTTTTCG	GTAACTTTGA	GGTACGTGAA	CGTGCTGCAC	GTAAGGTCG	TAACCCTCAA	180
	ACTGGTAAAG	AAATTGATAT	CCCAGCAAGT	AAAGTTCCAG	CATTCAAAGC	TGGTAAAGCA	240
50	TTAAAAGATG	CTGTAAAATA	ATTTTACTTA	AAAAGCCCTG	AATAAGGGCT	TTTTATTTTG	300
	CTTTAATAC	TTACAACCTG	TACATAAATT	GTAATGTTCT	TCTAAGTTTT	TAATCTTTGG	360

AACTACAAAA TATACATATG aATATTGaGa TTAATTGTTA GCGTTGaATT TACTTAAAAG 480
 GTAACCATGT CTACTATAGT ATTTTACGTT ATTTAAAAAG ATGAATAATG TAAATGAAGT 540
 5 AAAGGTTATT ATGAGAATTA CAAAAGCTAC ATAA 574

(2) INFORMATION FOR SEQ ID NO: 718:

(i) SEQUENCE CHARACTERISTICS:

- 10 (A) LENGTH: 493 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 718:

AAGaTATTGA AAmTgmAaTG GaGCACGCCC TTATTTGATA GAAGTAAAAG ACATTTAATT 60
 20 CTTACCGATG CAGGTCAAAT TTTTATGAG AAAAGTAAAG AAATTGTtGC ACTGTATGAT 120
 TATTTACCAT CTGAAATGGA ACGCTTGAAT GGACTGGAAA CAGGACATAT AAACATGGGC 180
 ATGTCGGCAG TCATGAATAT GAAGATTCTT ATCAATATTC TTGGTGCATT CCATCAACAA 240
 25 TATCCAAATG TTACATATAA TTTGATAGAA AATGGCGGTA AAACAATTGA ACAGCAAATT 300
 ATCAATGATG AAGTAGATAT AGGCGTGACC ACTTTGCCAG TCGATCATCA TATTTTCGAT 360
 TATACTACCC TAGATAAGGA AGATTTGCGA CTTATCGTGA GCAGAGAGCA TCGACTCGCA 420
 30 AAATATGAAA CTGTTAAACT CGAAGATTTA GCAGGTGAAG ACTTCATTTT ATTTAATAAA 480
 GACTTTTACT TGA 493

(2) INFORMATION FOR SEQ ID NO: 719:

35 (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1257 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 40 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 719:

GCATTGCCAA AACAATACGT TTATATTATT GAGGAACTAC TGTATAAAAG TAATGAATAT 60
 45 CAAAATAAAA AATCATATTA CGAAACACTT GTTAACCAAG TAATTGAACT TAAACAGGCA 120
 GATGATTTAA TTATTGGACT CGCTTATTCC GTACAACGCT TAGTCGTCGA TCATTTACAC 180
 50 GTTGTCGGTG ATATTTATGA TCGTGACCA CAACCAGATA AAATTATGGA TACTCTGATT 240
 AATTATCATT CCCTAGATAT TCAATGGGGT AATCATGATG TGCTTTGGGT TGGAGCCTAT 300

GATATTATCG AAGACGCTTA TGGCATTAAAT TTAAGACCAC TGCTTACTTT AGCTGAAAAA 420
TACTATGACG CAGATAATCC TGCTTTTAAAG CCTAAAAAAA GACCTGACAA ACACGAACGT 480
5 TTAACTCAAC GTGAAGAAAG TCAAATTACT AAAATTCATC AAGCTATTGC GATGATTCAA 540
TTCAAGTTAG AAATACCAAT TATTAAACGT CGTCCAAATT TCGAAATGGA AGAACGTCTT 600
GTGCTTGAAA AGGTTAATTA TGATACAAAT GAAATTACAG TTTATGGTAA TACATACCCA 660
10 TTGAAAGACA CATGTTTCCA AACTGTCAAT CGTGATAATC CAGCAGAATT ACTACCTGAA 720
GAAGAAGAAG TCATGAATAA ACTATTATTG TCATTCCAAC AATCTGAAAA ATTACGTCGT 780
CATATGTCTT TCTTGATGCG TAAAGGCTCT CTTTACTTAC CATATAATGG CAATTTACTC 840
15 ATTCATGGTT GTATTCCAGT TGATGAAAAT GGTGAGATGG AATCATTGTA AATTGATGGT 900
CATACTTACA GCGGCCAAGA ATTATTAGAT GTGTTTGAGT ATCATGTCCG TAAATCATTT 960
20 GATGAAAAAG AAAATACTGA TGACTTATCG ACGGATTTAG TTTGGTATTT ATGGACTGGG 1020
AAATATTCGT CACTATTTGG TAAACGTGCC ATGACTACGT TTGAGCGATA CTTTATTGCA 1080
GATAAAGCTT CTCATAAAGA AGAAAAGAAT CCGTACTATC aTCTTCGTGA AGATGTGaAT 1140
25 ATGGkTCGTA AAATGCTCaG TGaTTTCGGA TTAAATCCAG ATGAAGGACG CATTATTAAT 1200
GGTCACACAC CAGTGAAAGA AATCAATGGC GAGATCCTAT CAAGGCTGAT GGAAAGA 1257

(2) INFORMATION FOR SEQ ID NO: 720:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 400 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 720:

40 TGAGCACATG ACAGTGGCTG AAAACATTAA ATTTTTTAAA TCACTTTGTA AAAATCCAAT 60
TAACGATACA ACTATCAACG AATATTTACA GCAATTAAAC TTTGATGATA CGTCTGCCAA 120
AGTATCTACA TTGTCCGGTG GGAATAAACG TAAATTAAT ATATTAGTAG GTTTACTAGG 180
45 TCAACCTCGA ATTCTCATTT TAGATGAACC GACAGTTGGT ATTGATTTAA AATCTAGACA 240
TGACATCCAC CAACTACTTA ACATCATGAA ATCTAAATGT TTAATTATAT TAACTACCCA 300
TCATTTAGAT GAAGTTGAGG CACTTGCAGA TGGTTATCAA GTTAATTGGG CCAGGTnCCC 360
50 TTTTnTTCAA CAGTTTTTGG GGGCCAACCA TGGGCTTATA 400

(2) INFORMATION FOR SEQ ID NO: 721:

(A) LENGTH: 570 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 721:

10	CCTATTATATA TTATAATATA AATATTTTAT TTTTCAATAC TTAATTTTAA AAATCCCCTA	60
	TGAAAATGTT GATGAGCTAC ATCTTTAAAT CTTATTATAC ATTGTATAAA ATTATATTGC	120
	GAGGTAGTAA ATTGATATTA TACACTTTTG GTTGTGTATG CATCTCACCT ATCTTTTTTG	180
15	CTTTTTTCAA ATAAGAAAGT ATTA AAAAATy AATGCCTATA CAGGAACAGA CATGGCTAAA	240
	CTTGATTTAA ATAGTCTTGA CGACGAGCAC GTAAAATTAT TAATAAATGA ATTA AAAATAT	300
	CCAGAAACTC ATATCGATGT AAATGAATTA AAAACAATAG TTGCTAGTCG AATAAATGAA	360
20	AGGCAAGAAA TAATAAGTTT TAAGTTAGGA ATAAAGTACT TATTAACAAT AAAAAGAGGG	420
	AACATAGAAA AAGATAGGTT TTCAATTTC AATCATTTTCA AAGATACCTA TCACACCCTA	480
25	GTTAGAATAG ATATTAACGG TGGTACTCAC GATAATCCAG ATGGAACAAT CGCTCCGAAA	540
	AGTCATATTC ACATATATAA TGATAAGTAT	570

(2) INFORMATION FOR SEQ ID NO: 722:

30 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 722:

40	ATTTTAGTCT TAGGTGTTGA TTGCATGATG AATGCAGAAG TTATACCTGC AGCCATATTA	60
	GCACCTTCAT TATTGTGTAT AATTTGAATA TTATTTGCTT TTAAAGTATG TCCAATTAAG	120
	TTTGAAGTCG TTGTTTTACC ATTTGTTCCA CTGATAAATA CAATATCATC AACTTGCTCT	180
45	GCTAATTTTC TTAATATATC TGTATCCACT TTTCTAGCGA TTTGTCCAGG TAAATCTGTT	240
	CCTCTTTTAC CTA CTGCTCT ACTTGCTTTA CGCGCCAATT TCGCTAGATG GATTGCCGTC	300
	CACTGTCTCA TGTGTTTCCT CctCAAATt CCACTCGCAT CATTATAACA TGACAAGGCA	360
50	ACTTCAAAAA AGTTTCTCAA TCACAAATnG ATACCAGTGT	400

(2) INFORMATION FOR SEQ ID NO: 723:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 1113 base pairs

55

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 723:

	GATTATATGC TGTGGCAAA ACAATATACC CAGATGAATT TTTATTTTGA GTAATAGTAT	60
10	AACCATGCTT TGTCTTACTA ACTTTGACAG CTTCTAATGA ATTTGAAGCG TCTTTAAGCG	120
	TGGTATAATC TTCGCCGTAT ATCCCTTTTA AATTTACTCG ATACTTACCT TTAGGCAATG	180
	ATAATCTAAT TCTATCTGGA GCTTTAATGC GTATCGTTAC GGGTGTTACA ACGCGTCGAT	240
15	ATTTATAAGT GAGTTTATTT CTTTCTGTG TATATTCATT CACTTTAACA TCATGAGCTT	300
	TATCCGGCGA AAGTAATTCT AAATCCATTT CAAAATACAA ATCTTTAAAT TGATTAGAAA	360
	CTGATTTTGG CAACTGTACA GTTAGACCAC CATTATTTTG TTTAACTTGT AATAAATGTT	420
20	TTGTAGGAGA TTGCCAGGCT GCACTATTTA ATTTAATTGT TGAATCTGAT AGTAAATTTT	480
	TATTGGCTTT AAAATGTGTA TTAACATCTT TAATATTGTT AGAAACAATC CCTTGCAACA	540
	TTGCTTGTTT TTTATCTAAT GGAGATTTTA ATTCTTTATT GGAAAAGACC TTATTTGTAA	600
25	TATGTGCACT TGGATAATGG ATGGTATTTT TAGAATGAAT CCAACGAACT TTATTGTCTT	660
	TGTGTTTCTA CTTAATTTTA AATCCATATG GtAAGTTGTC ATCATGATtC ACTCTAATTC	720
30	GATCATTAAC ATTCCAAAGT GATAGTaAAT TTgACGATgC CAAGTAATCT ATAAGTGCTG	780
	TTTTTATCGA TTGGCATATT AATTGGAGT GTCTTGTCAT AATATTTTAA AATGTCTCCA	840
	TTAAAATAC TAGAATATAA TGAAATGCCA TTATAATGAT ATATAAATGG TGAATTTAAT	900
35	GCATAGTCTG ACATATAATC AATGCGATTA AATGAGCCTG TTGCATTTTG ATTTATCTTT	960
	TTTATAAGCT GGTTTACATA GTTACTATGG TAATCATGTT GTTTCAACGT TGATAATGAT	1020
	TGTTGATAAG GTTTGATTGC CATGTTTTTG TTGTTATCTA AAATGACGAT TTGTTGAATC	1080
40	ATaACGATTA ATACTAATAT TGCAACGGTT AAT	1113

(2) INFORMATION FOR SEQ ID NO: 724:

(i) SEQUENCE CHARACTERISTICS:

45

- (A) LENGTH: 464 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 724:

55	TGCCGTTTAG CAAAATCTAG TATCGCTTGA TGATCAGATT CTGAAATTC AGTGTGTACT	60
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	GATTGATTAA GTTTATATGC AAGTGCATGT TCTCGTCCAC CAGCACCAAT TACTAATACA	180
	TTCATTTATG TTACGCCCCT TTAAAATTAG TGTTTAAAAT GTCGAGTGCC TGTGACTACC	240
5	ATTGCAATAC CATGTTTATT AGCCATATCA ATTGAATCTT GATCTTTAAT CGAACCACCC	300
	GGTTGGATAA TTGCCTTTAT ACCATGTTGT GCTGCAAGTT CAACTGTATC TCCCATAGGG	360
	AAAAATCCAT CAGATACTAA CGgCTACATG ATCATTGATT TCAATAGCTC TCTCTAACGC	420
10	AATTTTAGCA GCACCGACAC GATTCAATTGG CCAGCAnCTA TACC	464

(2) INFORMATION FOR SEQ ID NO: 725:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1440 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 725:

	GTAAATnCA nTATTTnAAA TaTATTACCT TATTAGAAAA AGTCGTAATA TGAGGTGTAC	60
25	AAATGACGCA AATTTTAATA GTAGAAGATG AACAAACTT AGCAAGATTT CTTGAATTGG	120
	AACTCACACA TGAAAATTAC AATGTGGACA CAGAGTATGA TGGACAAGAC GGTTTAGATA	180
	AAGCGCTTAG CCATTACTAT GATTTAATCA TATTAGATTT AATGTTGCCG TCAATTAATG	240
30	GCTTAGAAAT TTGTCGCAA ATTAGACAAC AACAACTTAC ACCTATCATT ATAATTACAG	300
	CGAAAAGTGA TACGTATGAC AAAGTTGCTG GGCTTGATTA CGGTGCAGAC GATTATATAG	360
	TTAAGCCGTT TGATATTGAA GAACTTTTAG CAAGAATTCG TGCAATTTTA CGTCGTCAGC	420
35	CACAAAAGGA TATTATCGAT GTCAACGGTA TTACAATTGA TAAGAACGCT TTTAAAGTGA	480
	CGGTAAATGG CGCAGAAATT GAaTTAACAA AAACAGAGTA TGATTTACTA TATCTTCTAG	540
40	CTGAAAATAA AAACCATGTT ATGCAACGGG AACAAATTTT AAATCATGTA TGGGGTTATA	600
	ATAGTGAAGT AGAAACAAAT GTCGTAGATG TTTATATAAG rTATTTACGA AACAAAGTTAA	660
	AACCATACGA TCGTGACAAA ATGATTGAAA CAGTTCGTGG CGTTGGGTAT GTGATACGAT	720
45	GACAAAACGT AAATTGCGCA ATAAGTGGAT TATTGTTACC ACATGATTA CGTTTGTCAC	780
	GATATTTTTG TTTTGTTTAA TTATTATTTT TTTCTTGAAA GATACACTGC ATAATAGTGA	840
	GCTTGATGAT GCaGAACGAA GCTCaAGCGA TATTAATAAt TTATTTCaTT CTAAgCCTGT	900
50	TAAAgATATA TCTGCaTTAG ACTTGAATGC aTCTTTAgGT AaTTTTCaAG AGATAATTAT	960
	TTATGATGAG CATAATAATA AATTATTTGA GACATCGAAT GATAACACAG TGAGAGTTGA	1020

ATATTTAATT ATTAAAGAAC CAATTACAAC GCAAGATTTC AAAGGGTATA GCTTGTTAAT 1140
 TCATTCACTA GAAAATTATG ATAACATCGT AAAATCATTG TATATCATTG CGCTGGCATT 1200
 5 TGGAGTGATT GCAACAATTA TAACTGCCAC AATCAGTTAT GTATTTTCAA CACAAATTAC 1260
 TAAACCGCTT GTCAGTTTAT CAAATAAAAT GATTGAGATT CGACGAGATG GTTTTCAAAA 1320
 TAAATTGCAA TTAAATACAA ATTATGAAGA AATAGATAAT TTAGCAAATA CGTTTAATGA 1380
 10 GATGATGAGC CAAATTGAAG AATCATTTAA TCAACAAAGA CAATTTGTTG AAGATGCGTC 1440

(2) INFORMATION FOR SEQ ID NO: 726:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 375 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 726:

TGATATTCCG ACTTGCGAGG ATTATTGCGC ATTAAGGATT AACGCAGTAT GAGTCCAAAG 60
 25 ACGCGCGACA CCTGGAAAAA GGATTACCTA ATGCCTTATT TACAGTAACC TTGTATGATA 120
 AAGATCGGTT AATTGGTATG GGTAGAGTGA TTGGCGATGG CGGAACTGTT TTTCAAATTG 180
 TTGATATTGC AGTTTTGAAA AGTTACCAAG GTCAAGGTTA CGGCATCTAA TTATGGAGCA 240
 30 TATTATGCAA TATATTAAAG GTGTGGCTGT TGAGAGTACA TACGTTATCT GATTGGCAGA 300
 CTACCCAGCG GGnTAAATTA TATACCAAAT TTGGGTTTnA TACCTACCGA ACCAGAnTCC 360
 AGGCGGTGAT GTATG 375

(2) INFORMATION FOR SEQ ID NO: 727:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 471 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 727:

TAAAAAAGCTT AGAGATGAAA ATCATATTAT TTATCTGTTT TTGGGACAAT TTTTACTAA 60
 AAATGAAGAT CCATGGCATC AAATACTTAA TGATTTAGAA GTTACAAATT CTGTTGATAA 120
 50 TTTTTTAAGG TCAATAAGTA ATAAGGCCAA AGAAACAAAA AAAAGAGCTT TTATTATTAT 180
 TGATGCGCTT AATGAAGGTG AAGGTAAAAG GTTATGGGGA AATTATTTTC AAAGCTTTAT 240

AGATGTTATA TTACCCAAAA ACGCAATACA AGATAACAAT ATTGTAGTAT TTCAGCATGA 360
 AGGTTTTAGT AAGGAAGAAA ACTATAATCC AATTGTATCT TTTTGTGATT TTTATGGATT 420
 5 AGAGCTACCT AAGTTACCTA TATTAAATCC AGAATTCAAC AATCCATTAT T 471

(2) INFORMATION FOR SEQ ID NO: 728:

(i) SEQUENCE CHARACTERISTICS:

- 10 (A) LENGTH: 1750 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 728:

TAGGATGTTT CACCCTgGCA ATTGcTCTAA GACATCtACa GCAGTAGAAT ayCCTGTTTT 60
 20 CGTctTTTTA ATAACAGGTA ATTGTAATGT CTCAAACAAT ACAACACCTA ATTGCTTAGG 120
 AGAATTTATA TTAAATCTT CACCAGCTGC ATCATGGATA TTTCGAATCA AGACGTCTAA 180
 TTTTTCTTGA ATTTCTTTTT CCATTCTTTC TAAATCATGA ACATCTGTAA ATATACCAAT 240
 25 TTCTTCCATT TCACTTAAAA TCTTAGCTAG CGGTAGCTCT AAATCAGCCA AGAGTTCTAC 300
 CTGATTGTAT TCTTCTAATT GTTTATCCAT ATTTGGTTTT GCAAAGTAAA TTGCATCAGT 360
 AATAGAAGCA ACATATGGAT TTAAACATC ATCTTCAGGT ACCTTAAATT TCTTACCTTT 420
 30 TCCATATATA CTCACATCGT CTTTCACAAA ACTTTGACCG TACAATGAAA CAACTGATTG 480
 AACATCACTA ATCGTACGAG ATGGATCAAT TATATACTG GCCAACATAA TATCGAAAGA 540
 AATATTTTGA ATATCAATCC CCAATCTATG TGATGCTACA TATGTTTTTT TAGCATCATA 600
 35 TACGACTTTT TTCGAATTCG GATTTTCTAA CCATGAAACT AGTTCGACAT AATTATTTAT 660
 GTCATCCGCA TTAATTACAA TATGTTTCTC ACCTGtAAAT aAAGAGAATT TTAAAtATT 720
 40 ATTTcGCAAA TAGtTACCAC CGtCTAATTC GAAATGGATG GCCGCTTCTT TcAATGAAGT 780
 AAAATCcAAT ATTATCAAAA GACGTTTCcA ATTTCAAATG TCTTtTCTAT TGCATCTTCA 840
 ACGcTtGCTG ATTGaTCAAT GTCAGCCAAC AATTGTTTGA ATTCTAACTT CTTAAACAAT 900
 45 TCGATTTTTT CTGTGTGTTT ATCTtGAKGA GTCATTAAAG TATCTTCaAG TTTTACTTCa 960
 ATCGGACTAT CTACATTAAt CGTTGCTAAT TCTTTACTCA TTAATGCATC TTCTTTGCTA 1020
 TTTTGAAGTT TTTCTTTTAA CTTTTTACCT GAAATTTTCA CTAAATGTTT ATAGACACCT 1080
 50 TCTACTGTGT CAAATTGGTT TAGCAATTTT ATTGCTGTTT TCTCTCCAAC ACCTGCAACA 1140
 CCTGGTATAT TATCAGAAGT ATCTCCCAT TATCCTTTCA TATCAATAAT TTGATTAGGT 1200

CCTTTTTTAG TGTAATAAAT GGTACATTA TCCGTTGCAA GTTGTGTTAA ATCTCGGTCT 1320
 CCCGTAATAA TAATTGTCTG AAAGCCCGCT TTATCTGCTT CTTTACTTAA AGTTCCGATA 1380
 5 ATATCATCTG CCTCATAGTT ATCTAATTCA TAACGTTTAA TATGATAAGC ATCTAATAAT 1440
 TGGCGAATAT AAGGAAATTG CTCACCTAGT TCAGGCGGCG TTTTCTGGCG TCCACCTTTA 1500
 TATTCACTAT ATTTTTCATG TCTGAAAGTC GTTTTACCTG CATCAAACGC TACTAAAAAA 1560
 10 TGATTGGCT TTTCTTCTTT TAAAATCTTC TCTAGTAACA TTGCAAACC ATATACTGCA 1620
 TTGGTATGAA TGCCTGCTTT GTTTGATAAC AAAGGTAATG CATAAaAAGC TCTAAAACTT 1680
 15 AAGCTATTAC CATCGaTTAA TACTAATTTA TTCACAATTT TAACCTCCAG AACTAATTTA 1740
 TATATnTGTG 1750

(2) INFORMATION FOR SEQ ID NO: 729:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 439 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 729:

AAATTAATTT TAACATCCTT TCAAAATAGT TTTAACGGAT CcTCCcAAAA CGTAAACTCA 60
 30 CATCAGTTAC TTGTAACATG CATTTTCTCC TTTTTCAT TCGATATTCT AACGGAAGAA 120
 TTATATCATA TTATCGTCAC AGTTTCGACC TCATATAAGT TGTAATGATA GAATGACTCA 180
 CACATGTTAT AATAATAAAG AATACAAGAA TCGAAGGAGA ATAAACATGG CATTAGACAA 240
 35 AGATATAGTA GGGTCTATAG AATTCCTTGA AGTAGTAGGG TTACCAAGGT CAACTTACCT 300
 TTAAAGGAC CAACGGTGAA ACGTAAAGTT AAACCAATCA GAATGAACGT GATGATTGAA 360
 40 TTAGAAGTAG GGGAGnATAT AGTTCCTCAT TTATCCAACC GGTCAGGTGG ATTATTGCAC 420
 TCAAATATGC nGnTATACG 439

(2) INFORMATION FOR SEQ ID NO: 730:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 481 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 730:

AGTTTAGGAT TGATGACAAA GCCATTACGA CCAACAAATC CTAAACCTGC ACGTTCTGCT 120
 ACTGCCCTAT CTGATAATAC ACCCGTATCT ACCATAGATT TGATTTCAAC ATCTGGAAC 180
 5 TTAGATTCAA TAAATGCAGC TAACATGTCT AATCGTTTAC GCATAATTGT ATGATAATCT 240
 TGACCCACG ATGCTCTAGC AAATAAGCCT CTGCGATCAC CTCTAACACT CTTAGGTGCA 300
 CCTTTCAGTT TGTTAGGATA ACCAACTGCA ATTGCTATGA TTGACCTTGC TGTTGGTAAG 360
 10 GATAATTTAG GCTCCGTTTC TAAAGCAATA TCAGATTCTT CAAaTCCTGA GGCATAACCA 420
 TTTGCATGAT ATGCTTCTAG CTTTGTCTTC AATTCATCAA AGGGnTCGGC AGTAGTAAAT 480
 15 C 481

(2) INFORMATION FOR SEQ ID NO: 731:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 828 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 731:

GTGATGAAAA ATCTTTTTCT ATTGATTGAG AAAATAGTTA TTTATATAGT TTTTAAAGAA 60
 AAAAAGTGAT AATATTTAGC TAATCTAATG AAAATTGATT TATTGGACAA AAAATACATT 120
 30 TTAAATGAGT AGAGGAGGCT GCAAWTGGGT TACAGAACTT TAAAAAGTAT TTTTCATGAA 180
 CACAATGAAA GTAAATGAA GGAAGAGTAT ATTAAAAGAT TTAATTCTTT mGCTTCTTTC 240
 AATACTAATA TTAATATCAT ACCTATGGAA AATGGAAAAA AAGTTAATGA TTTGGAATAT 300
 CCTCTATTCT TTATGGTGAC TAAAAATCTA TCAAAAAAAC AAGAATTAAT ATCAATTAAT 360
 AGTAGAAAAA TTGATAGAGC ACTTAATTCT TTACCATATG CAGCTAGAGA ACAATATTTT 420
 40 AATGATTTAT TAATCGATGA ATTACAAAGT ACTAATGAAA TTGAAAATGT ATTTAGTACT 480
 AAACAAGAGA TTGCACATGC GTTAAATAAC CAAGCATCAG AATTTCTTAA GTTCAGAGGC 540
 CTCGTGGATC AATATAAAGA GATAGAACTT AATAAAAAAA TTAAAGTTGA TAATGTAAGA 600
 45 GACATTAGAG CGATTTATGA TAAATTAGTT TCAAAATGAAA TTAACGAACA AGATAAGTTA 660
 GATGGAGAGC TATTTTCGTAA AAATTTTGTG GGTGTGCATG ATGGGTCAAC GAATAAATAT 720
 ATACATGTTG GGTTACAACC TGAAACCAAA ATTGTTGAAT TTATAGGTGA AATGCTAACA 780
 50 TTTTAAAT ATTTTGATGC GCCTCAGCCG TTCAAAATCA TGGCTAGT 828

(2) INFORMATION FOR SEQ ID NO: 732:

(A) LENGTH: 1622 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 732:

10	CGTATGTTTC GAATTTTATG nATTGCATTG GATAATAGTA CCAGTTAAAA GAACTAAGAT	60
	TGTAATTATC CCCCCTTAAA ATTCAAGAAT ATATTTTCTT AATCTATCAG CAAGAGGTTA	120
	TATTTCAAAG TGTTTATTTT TAAAACAACA TCTAAAAGCC ATTTcATAAt AAwGTTAAAT	180
15	CaTTAGaATG TATAAAGATT CCaATTAATA AAAATAGATA AAATGCAATA AAGTTCCAAA	240
	TACTTATTAT TATTCATCAC AAATTACGTG ATGCCCTCTA CAACACTAAA TCAAGGATGA	300
	TATTTATTTT ATATACATTA GCATTCATTG TTTGCTTACC CACATTATCC TGTTTAGTCT	360
20	TTTTTATAAC TCTAGTCTTG AATGTCATAT TTACAAAGAA AAAAACACTA AAATATTTTAA	420
	AACTAACACT ATTTATTAC TTTGTTCTTT TATAGCACCT TTTATGTTTA TTTTCTTGTA	480
	TTCAATAAAT AGTATGGAGA TGATAATTTA AAGTAGATAT ATTTGAAGTA TACTATAGAG	540
25	TAAATTATAT TGGGGAAATA TGTAACGAA CCGGTTGATT TTATAGTGGA TTAACACTTC	600
	ATAGAGAATA TAATCAAGAA CAAAAACAGT CAATAGGTGT GAATTTTTTTT AAAGACGGAT	660
30	CTGTTGCTAC TAAAAAAGA AGTATACAAT TCAATAGTTA AACCTTAAAA CAAGAAATAT	720
	TATTCAAAAT CAATGAATTT CCTATCTTAT TAGTTTTAAC AATATTTATT CTCATAGAGT	780
	TTGTCCAATT AAATATAGAT GATTCAAATA TTTATAAGCA TACAAAAGAG CAGTAAGACA	840
35	TTTTCTAATA GAAAATAACT TTACTGCTCT TTGTACATTA CTCATCAACT ATTGTAAATT	900
	AAATAATAAA TAACTACCTA TTTTATTATT CAGCTAAAAA ATGCTCTGCT AAATATTTTG	960
	CTGCGCCATC CTCTTCATTC GTGTATGCCG TTACATCTGA AGTTAATGCT TGGATTTTCA	1020
40	GGCGTGCAAT TTTCATAGCA ACTGTATAAT GACCAAATTC AAACATTGCT CTATCATTGT	1080
	CGCTATCTCC AATAACTAAC GTTTCTTCTT GATGAATACC AAAATGTGCA ATCATTCTTT	1140
	TAATGCCTGT ACCTTTATCA GTTTGATAAG CCATTGTTTC CGCATTAAAT CTTGATGAAT	1200
45	TTGARACACT AATCTGTAGT TGCACATGAT TTTGCTTTAA TTCATCTCTA AATGCTGTTA	1260
	TTTTTTCTAA ATTAGAACTG AATAGATAAA TTTTGAATA TTCACCTTCA GGAAACTTAG	1320
50	TTACCCAATC TATCTTACCA GCAAGCGCAT CTTGTCTTGA AGACCATTCA CTATGACTTA	1380
	CGCCATTAAT AGGATCTTGA CTACGAATCA TATCTCGCAT CCATGTTTCA TCTTCTTTTA	1440
	AAGAACTCT ATTACCTTCA AAAGGAAATA CCTCATAATA AATTTGTTGG CGCTTAGCTA	1500

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CTACTTCTCC AATTGTTCCA TTTGAACTAA TGATGCCATT AACCGCAAAA TCTTGAGGTA 1620
CA 1622

(2) INFORMATION FOR SEQ ID NO: 733:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 472 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 733:

AATGCCAnAT AAATCCAAAT TCTTTTAACG AACAAGAGTG CCCAAGTTAT TGCTGATCGT 60
TATGCCAGAT AnGCATATCA ATGATAATTA TGGTTTAGAA AGAATTTCTA AGACAAATCA 120
TGGATATAAT TATGTGTATT CCAATGATAA TTCAACTAGT AAGCAACATG TAAGTATTTT 180
AAATCAAGGC ATAATAACGA AATAATAGAT GGAACAGTGT ATTCTAATTG GATATACTGT 240
TTTTATTTTG CAATAATTTA ATTTAAAAAG GTGAATTCAA CTTATAAAAT GATGTAAATG 300
TTATGTCAAA ATCAACCAAT CCGTAATGTA TTTTAAATG TTAATATAGT TCTGAAGAAG 360
TATAATGAG GTGTTGAAAT GGCTAAAAAT AAGAAAACgA ACGCGATGCG TATGCTTGAT 420
CGTGCAAAAA TTAAATACGA AGTTCATAGC TTTGAGGTAC nTTAAGAACA TT 472

(2) INFORMATION FOR SEQ ID NO: 734:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 519 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 734:

CATAGCCCCA AATTTTTTCT ATTATTTGTT CACGAGTAAA GATTTGCTTA GGACGTGCTG 60
CAAGCATAAA TAATAATTGA AATTCCTTGT TCGGTAACGT CATCGTTTTA TTAGATACTT 120
GGAGTTCCAA ATAGGATTGG TTTAGCGTTA AGTTGCCAAT AGTCATTTCT GAATTTGAAT 180
TGATATTATA TCGACGTAAT ACAGCACGAA TTCTAAAAAT AAGTTCCTTA ACCTCAAAGG 240
GTTTGGTTAC ATAATCGTCA GTACCGCTTA TAAACGCACG CTCTTTGTCA CTAAGTGCAT 300
CCCGCGCTGT TAACATAATA ACTGGTATAT CATAATCATT TTTAATGTA TTACATAATT 360
GAAAGCCGTC CATACCATCC ATCATAATAT CTACCACTGc AATATCGaCA CGCTGTTTTT 420

GTTTTGThAA ATGGGCTAGC TATAATAATT TAGGGGATT

519

(2) INFORMATION FOR SEQ ID NO: 735:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 735:

ACTTGAAAAC GATAAACAGT ACTTTCAGC TACACATTGG AAAGCTATAA ATGGGATACC 60
 TTATGCAGGC AGTAGTGATA TTGATGGATT GCCTCAAGAC GGTATCATTT CGGTAAATGA 120
 TAAAAATAAA TTAGATAATT TAAAAATAGG CGAACAGGAA TTATTCAAAA TAGCATTGTA 180
 CAGAAATCCC CAAACGGTAA ATTGTGAAAA ATAACAGTTG ACGATAGTGG GAAACTTGGT 240
 ACAGTGCTAT TTTATTAGAA AGGAAGGTGC ATTATGAAAA ATTTGTATTT AATAAAGGAT 300
 TTGGGAGCTT TAGCAGGTCG AGATTATAGA GCTAAGGAAA TACAAAACCTT ACAAGGAATA 360
 GGCATTGCGC TGGGCTGACC ACCAGGGTTT AnGTGnCCnC 400

(2) INFORMATION FOR SEQ ID NO: 736:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 780 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 736:

CTTTTTTATT GAAAAAGTGG TATTTGATTA TCTATTTACT ATTTATATTA GCGGCACTCC 60
 TTATTACATT AACGACAATC CAACATGTAA CAGAAGATGA CAATCATnTT AATATAGGTG 120
 TCGTAGATAA AGATCAATCA AGTGAAACGA AATTAATCTT AAACCTCTATT GGTAAAGGGA 180
 GTAACCTAGG AAAAAACGTG AGCATTAAAG CATATGATGA TAAGCAAGCA CATACTTTGT 240
 TAAAAAACA TAACTTCAA GGCTATTTTG TTTTGTATAA AGGTATGACC AAGGCATTTT 300
 ATAAACAAGG CGAACTACCA ATTTTCAGTAT ATACATATGA TCAACAATCC ATGAAAAGTG 360
 TCGTGCTATC TCAGCTAACA GATTCTGTTT ACCAACGTCT TATGCGATCA ATGGGTGGCA 420
 TCTTAGCTTT TCAAGACTTA GCACCGAAAG CATCACATTC TGACAGTATC AATGTTATGA 480
 CTGATTTGCT GATtACAGGA TTAAACCGTT CAGGTGCAtT TAACTTAGAA CCGATTCAAT 540

CACTATCTTT ATTTACAGTT TTGAAAATGA ATCAAGATAC TGTATTGAAA GCGCGATTGA 660
 AAATGTTTCA TTTTCTAAA GAGCGTTTAT TAATCATTCG TACGTTGATT ACATGGTTTT 720
 5 ATACTATGTT ATGGGnGTAT CGnTGGTGTA GTTTGGAATG TGGTTCAGTA TTCCGAATnA 780

(2) INFORMATION FOR SEQ ID NO: 737:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 946 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 737:

TATTTAATTT CTnATTnTG GTTTTTAATT nTAAGATGAC CATAAATGAA TTTCTTCTGC 60
 TGTCATAGAA TTAGAGCAAA ATACGAGCAT AAATTTAACT AATTTCTTGC TTGTCTTATA 120
 GTCTTGATTG CCTTGTA AAA ATGTTAGTAT TAATTGCTTC ATCGTTTCGA ATTGTTGTGT 180
 TGATTTAATA GCGATTGCTA AACCTATATT TTTTTCGAAA AGCTTTTCAA AACATCTATT 240
 25 TAACAGGTTG TAATTCGTTT GGCTAATCTC AATATCGTGA ATATCGTCAA TGAAAACGAC 300
 AGGTTTTGGT AAGTGCTCAA AGTTAATATC GTAATATTCA TTGAAAAtAA ATTGAAATAG 360
 TTCATTGAAA TTAATAATC GAACAAATAC TTTGGCACGC TGACTTCGAT CTTTCGGATT 420
 30 AAAATCATCT ATATGAATAT CTGTTGTATT TGTAGCCAGT TGAGCTGTTA AATCAATTGT 480
 TGAAATTAAC TCAGTGAATT GTGATACGTT ATCTTGTTGG AAGTGATTTT GTGGTGGTTC 540
 AGTAATCTTG GAAACGAGTG AACGGAAGTG TTTAGGACTA AAATGCAAGT AATTCCTTAAA 600
 35 TTGATTTGCA AAATTTGTAT GACTGTTAAA ACCGGCCAAT TCAGAAACAG TTGTAATAGA 660
 ATGTTTTGTA GAAAGTAATA AATTGATGGC GTTAACAAGT TTAATACTTG TAAAATAATC 720
 TTTAAAATTC ATACTCAAAT ATCGAACAAA AAGATTAGAA CAATATGATT CAGAGATGTT 780
 40 GCAATGCATC GCTATATCTT TTAAAGACAA GTGCGCATCA ATATkGTCAT GAATATAGTT 840
 TACACAGTCT ATGAACACCG GATTGCTTAA AGCAATATTT GGTAAATATT CATGATCTAT 900
 45 TCTTATAAAA GCTTCTTTAA GTAAAGTGTC TATnATACTT TGACCT 946

(2) INFORMATION FOR SEQ ID NO: 738:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 397 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 738:

5 TTTATTTGAT GATGTACTAA AGCAAGATGA AAGATTTGTT ATTGTAGTTC AAGCATTAGA 60
 AGAAAAGAAC GGACAATTAT TAAAGAGAAC TTTAAGGGAA TATCCCGGTT TAAACCATAA 120
 ACAAATGAAT GATTTATTTA TGCACCTAAA GGAATTATTT TCCGAAGAAT CATTTGCTGA 180
 10 AAACCAATCA GCGTTCAGTA TTACAGTTTA TACAAATTTA GATTATACTG CTGACCAAAT 240
 ATATGCTCAT GTAAAACGTT TCAGAGGTAA GCATGACTGG ACACAAACAG CTAAATAAAA 300
 TCAAGATGCT TGCAGTGgAT TkTAACmATT AATGtTAGaT gTCmCyGcAT TTTTaATGCC 360
 15 ATTCGGTAAT TAATCCGGAT GGTCCAATTT AATTAAC 397

(2) INFORMATION FOR SEQ ID NO: 739:

(i) SEQUENCE CHARACTERISTICS:

20 (A) LENGTH: 915 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 739:

CAAGGTATTT CATTTGACCC ATTACACCA TTAATAGTGG CAGCAGCATT ATACTTTGTC 60
 30 TTAACATTTG TACTTACACG CATTATGAAC ATGATTGAAG GGAGATTGAA TGCCAGTGAT 120
 TAAAATAAAC AATCTTAATA AAGTTTTTGG AGATAATGAA GTTTTAAAs ATATCAATCT 180
 TGAAATCAAT CAAGGGGAAG TAGTAGCAAT AATAGGTCCA TCTGGTAGTG GTAAAAGTAC 240
 35 ATTGTTAAGA TGTATGAATT TATTAGAAGT ACCTACTAAA GGTCAAGTGA TTTTGAAGG 300
 CAATGACTTA ACGGAAAAAG GGACACAAGT AGATAAACTA CGTCAAAAAA TGGGTATGGT 360
 ATTTCAAAAC TTCAACCTAT TTCCACATAA AAAAGTTGTC GATAATATTA TTTTAGCTCC 420
 40 TAAATTATTA AAGAAAGATA ATAACGATGA ATTACATAAG GAAGCATTGT CGTTATTAGA 480
 TAAAGTGGGA TTAAAAGAAA AAGCAGATGT ATATCCGAAT CAATTATCAG GTGGTCAAAA 540
 45 ACAAAGGGTA GCAATTGCAA GAGCTTTAGC AATGCATCCA GATGTTATTT TATTCGATGA 600
 ACCAACTTCA GCATTAGATC CTGAGGTAGT TGGTGATGTA TTAAAAGTAA TGAAAGACCT 660
 AGCCAAAGAA GGTATGACCA TGGTGGTTGT GACACATGAA ATGGGATTTG CCAAAGATGT 720
 50 AAGTGACAAA GTCATATTTA TGGCAGATGG CGTTGTCGTA GAGTCAGGCA CnCCAGTCGA 780
 AATATTTGAA CAACCGCAAC ATGAAAGAAC ACAAATTTTC TTAGCAAGAG TATTATAACA 840
 ACCTAACGAG GCTTGAATAT ATGATACGCA CCACAAAGTT ATATCATATA TTCAAGCTTT 900

(2) INFORMATION FOR SEQ ID NO: 740:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 435 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 740:

AGTAAATGCG ATGTTGCATG GAGGCTATAG CAATGAGCAA TAAAGCTTGG GGCGGTAGAT 60
 TTGAAGTACA ACCTGAAGAG TGGGTTGACG ACTTTAACGC ATCCATTACT TTTGATCAAA 120
 CGCTCATAGA TCAAGATATC GAAGGCAGCA TTGCACATGC AACTATGCTT GCGAATCAAG 180
 GCATTATTAG TCAACAAGAC AGCGAACAAA TTATACAAGG ACTAAAATCT ATTCAACATG 240
 ATTATCATCA AGATCAAATT CAATTTAGTG CATCATTAGA AGATATTCAT TTAAATATTG 300
 AACATGgAAT TAATTAAACG TATCGGTGgA TGCTGGTGGT AAGTTGCATA CTGGACGCgT 360
 AGtAAACGAT CAAGTTGcAA CAGACATGCA CTTGTACACT GAAGAAACAA GTGCAAGnnn 420
 TCATCGCATT GGATG 435

(2) INFORMATION FOR SEQ ID NO: 741:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1198 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 741:

AATATCATAA CCAAAGCTTG TCATTACTTA TATGTAAAGA TTAGAGGCTA ATTACATAAT 60
 CCTAACTTAT TTAACAGGAA GTCATGAAAA CTATATTACA ACTAAAAGTA TAACTTTCCA 120
 TCACCAAAGT CAGAATTTAT TGAAACACTC AACTGATAAT ATAGAAGGCT AATTATAAAA 180
 ATACCTGGCG ATTAATAAAC TGTTTCCGTT TTTTAGCACT TAATATATTT AAAAAGACAA 240
 ATAGAGCCCT TTCAGGCTCT ATTTnCTGTA TCCTTAACAA CAGAAGCTGT TAAAACTACC 300
 CGTCTTTTCa CAaCCAAaGc TaCAAAAaG aTgGCTAGTT ATTCTTTTCGT CACCCGCTGA 360
 ATCATTAGTG TTGTTATTTC CTTTAACTTG CACGTCTAAA TCAAGaACTT TTTCCAAaGA 420
 TaAAACCCCC TATTTAAAAG TTGAAGTTAA GACCCcTTCA ATTGTCATAT TAATCATTAC 480
 CACACAATAA ATCAATGAAT TTAATAATAA TTATTTGTTA TTAATTTGTA AATCGTCATT 540

TGAATATTTT TTGTTTAACT CTTAAATTTT GGGTTTAACT TCCTCTATTT CTAACAGTTA 660
 TACTCCAGGA TTAGTTTCTT TAGAATCCGT ACCGATTAAT TTAACAGTAT GGTTTTGCCA 720
 5 GTCAACTTCA TAAGTAGATG TAAACGTTAC TGTATTTTGA TnTTTGTAGT TATTTCCAAC 780
 CCAGTGTAGT CGATTCCATT GATTAGTATA TCTATCCATT TCTCTTTGGT AAGTTACTTT 840
 10 GATTTTAGAT TtTTTTGTAT CATTTTGTTC ATGAGAAAGT ACGCTTATAA ATTCTGGGTT 900
 AAAGTTACCA CGCGCCAATA AAGGCATTTG ATGTGTTGGC AAGAAATTTT GACCAGCATT 960
 TGAACTACTT TGTCTACCAC CTAAAAACAG TTCATTACCA TATGTTGGGT CATAACTATC 1020
 15 TCTACCATAT GGTCCCCAAC CATTATTCAT AATTTTGTGC GCCTCAACAC CCCAGCCAAT 1080
 TGATTTATGA TTTGTTTTTC TATCAATCGT AGTTCTGTAA CTTTCTTGTT TATAATTTAT 1140
 CGTTTCTGAA AATGATTTTG ATCCATTTAA TCCACCTGAT AAGCCATTAG ATATATTA 1198

(2) INFORMATION FOR SEQ ID NO: 742:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 818 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 742:

GTGGCATATn CAAACTACTA CTGAAAGATC AATTACATAC GTACAGATTT TGCAAAATGA 60
 TCAAGATTAT CCAACAATTT TTAGATGAGa CAAAACGTAA ATCTGTAATT AATTcAGATG 120
 35 TTAATGTAAC GGTAAGAGAT AGAATAATGA CTTTATcAAC GTGCGAAGAT GCATATAGTG 180
 AAACGACGAA AAGAATTGtT GTTGTCGCAA AAATAATTAA GGTAAGTTAA ACAGAAAmGA 240
 GGATAATTAT GAAATTTATG GCAGAAAATA GGCTGACGTT AACaAAAGGA ACAGCAAAAG 300
 40 ATATTATAGA ACGATTTTAC ACGAGACATG GGATTGAAAC ATTAGAAGGC TTTGATGGCA 360
 TGTTTGTTAC ACAAACTTTA GAACAAGAAG ATTTTGATGA AGTGAAAATT TTAACAGTTT 420
 45 GGAAATCAAA GCAAGCTTTT ACGGATTGGT TAAATCTGA TGTCTTTAAA GCAGCGCATA 480
 AACATGTTAG AAGTAAAAAT GAAGATGAAA GTAGCCCGAT TATAAATAAC AAAGTAATTA 540
 CATATGATAT AGGCTATAGT TACATGAAAT AATTGAATTT AAAGAGGTTG CAGTACTTGT 600
 50 TATGACAATT GGTATTGTTA GCTTTTGTAA CGACCATACA TGATACCGAT GATGGTCGTT 660
 TTTTAAATGa ACACAAACAT GCTAACAACA AATTGCTAAA ACATAGTTTG aTTTGAATGT 720
 GgCTTTGGAA AATAATCATC CatTATATCa TTtTGGATTn TATTTTGGAA GAAGAAAAGA 780

(2) INFORMATION FOR SEQ ID NO: 743:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1209 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 743:

	TGCTGGTAAA TCTTCCCTTA TCAAGTCTTT AATTGGTGAA TTTAATGCTA CCGGTACTAA	60
15	ATTGTTATAT AACAAACCTA TACAACAACA ACTGCAACAT ATTACATATA TTCCACAAAA	120
	AGCACATATT GATTTAGATT TTCCTATAAG TGTGGAACAA GTGATTTTAT CAGGTTGCTA	180
	CAAAGAAATT GGATGGTTTA GACGACCTAA TAAATCAGCA AGGGATAAAC TCAAACAGTT	240
20	ATTAAGCGAT TTAGAATTAG AATCTTTACG TCATCGACAA ATTTCAGAAT TAAGTGGTGG	300
	ACAATTACAA CGTGTGCTAG TAGCAAGAGC ATTGATGTCC GnaAGTGAAG TTTATTTTCT	360
	AGATGAGCCG TTTGTGCGAA TTGATTTTAG TAGCGAAAAA tTAATCATGA CAAAAATcGA	420
25	GAACTTAAaa CAACAAGGAA AACTTATTcT TATCATCCAC CATGATCTAT CAAAAGCAAA	480
	GCAATACTTT GATCGCATTa TTCTATTAAA TCAAACATTA CGATACTTTG GTGATAGTGA	540
30	AGAGGCTATG AGTGTCACtC GCTTAAACGA AACATTTATG AGTAGCACTG ACTGTAGTGA	600
	CCCTAGTCAA AGGAGCAATA TAACATGTTA GAGTTTGTcG AACATTTATT TACATATCAA	660
	TTCTTGAATC GAGCATTGAT AACTTCAATT ATTGTAGGGA TAGTTTGTGG TACAGTTGGT	720
35	AGTTTAATTG TATTACGTGG TCTTTCATTa ATGGGAGATG CAATGAGTCA CGCAGTATTA	780
	CCTGGTGTTG CCCTATCATT CTTATTTGGT ATTCCAATGT TTGTAGGCGC ACTTATAACT	840
	GGTATGATCG CAAGTATTTT TATCGGTTAT ATCACATCTA GTAGTAAAAC GAAACCTGAC	900
40	GCCGCTATTG GAATTAGTTT TACCGCTTTC TTAGCTTCGG GGATTATTAT TATTAGCTTA	960
	ATAAACACTA CGACAGATTT GTACCATATT CTGTTTGGTA ATTTACTGGC AATCACAAAT	1020
45	AGTGCATTTT TAACAACTAT TGTGATTGGT TCAATCGTCC TTATTCTAAT CATTATTTTC	1080
	TATCGTCCAT TAATGATTTc TACATTcGAT CCAACGTTTA GTAGAATGAG TGGTCTAAAT	1140
	ACGACGTTAT TACATTACTT TGTGATGTTG tTACTCTCAT TAGnaACAGT AGCAAGTAtT	1200
50	CmaACGGTA	1209

(2) INFORMATION FOR SEQ ID NO: 744:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 675 base pairs

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 744:

CCGCCTTTTCG TAAACCTAAT ATAATACGAA ATTTTCGTAT TGTCAACATT AAATACGTTT 60
 10 TTTTCGTAAA AAACCTTACT ATGATATGAA AATTTCGTAT AATAAGAAAA AAGGAGGTAA 120
 GTAATATGAA CAAAGAmAGm AATATTATTA TAGCCAAAAm CATTAGAAAA TTTCTCAACG 180
 ATTCAAATAT GTCTCAAAAG AAACCTTGCTG AaCTCATTAA CATAAAACCA TCTACTTTAA 240
 15 GCGATTATTT AAATTTACGT TCCAACCCCT CTCACGGCGT TATACAAAGG ATAGCTGATG 300
 TTTTCGAGGT TGGTAAAAGC GACATAGATA CTACATACAA AGACGATAAC GACATCACTT 360
 CCATATACAA CAAACTCACA CCTCCCCGCC AAGAAAACGT ACTTAACTAT GCAAATGAAC 420
 20 AATTGGAAGA ACAGAATTCT AAAGGAGATA ACGTTGTAGA TATTAATTCA TATAAACAGG 480
 AGAAAACTCC AGTTAACGTC AATGGTTGCG TCTCTGCTGG TGTAGGAGAA CGTTTACACG 540
 ATGAAACGCT ATTTACTGAA ATGGTTAAAG GACCTATCCC CACACACGAT TTAGCGTTAA 600
 25 AAGTAAATGG TGATTCTATG GrACCTATGT TTAAAGATGG CGAAATCATA TTTGTGGAGA 660
 AAACCTCACAA TnTGA 675

30 (2) INFORMATION FOR SEQ ID NO: 745:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 924 base pairs

(B) TYPE: nucleic acid

35 (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 745:

CAGGTGTCAT AGTTGAACTT GGtGGTTTTG GACTAATCGT TAAATCATCA ATTTGTGTCA 60
 TCCAAGGTTG GAATTTACTG CCTTGTGTCT CCAGTGCGCT GAAAATACCT TTATCTTGAA 120
 45 ATAAGTCAAC TAACTCTTGG ATACCTTTAA TTAATGCTGG GTTACCACCA GAAATTGTAA 180
 CGTGGTTAAA TAAATCGCCA CCAATTCGTT TTAATTCATC ATAAATTTCT TCAGCGGTCA 240
 TGAGTTTTAT ATCGCCTTTA GCACTACCAT CCCAAGTAAA TGCAGAATCA CACCAGCTAC 300
 50 AGgATaATCA CATCCAGCTG TTCTCACAAA CATCGTTTTT CTACCGATTA CTCGACCTTC 360
 ACCCTGAATG GTTGGACCGA ATATTTGAG TACAGGAATT TTAGCCATTA GTTACACCTG 420
 TTCCTTTGGT CTAAATACGA CATAACTTGT TGGTGTCTTCT CTTACAAATA CTTGAATACA 480
 55

TACGATTTCA GTTGAAGGGA TTTTGT TTTT AAAAGCAGGT AAGTTATTTA ACAGTTGATG 600
 GTCAAATTTA CCGTGTATCA TCTTTTTC AA ATGGCTAAAG TTCACTAAGA AGCCAGTGTC 660
 5 ATCTAGTTTA TCACCGACAA TTGTTAAaya cAAAGTAAGT ATGACCATGG ACATTTTGAC 720
 AAATACCTGC TTCTTCACAT GGAATGTGAT GTGCAGCCGA AAAATTAAAA TCTTTATTTA 780
 10 ATTCGAATTG ATATGGATGC GTTGTACTAG GATAGATTTG TTGTAACATT TTAAAGCGCT 840
 CCTTTACTTT CAAGATATTG ATTTAGTCCA CGTTGACGTA AATGACAAGC TGGACATTCA 900
 CCACAGCCAT CCCCAATGAT ACCG 924

(2) INFORMATION FOR SEQ ID NO: 746:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 971 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 746:

ATCTTTTGGG TATTTTCTAT ATTAGCTGTT GTTTTCTTAG TATTATTTAG TTTTGCTGTT 60
 GGTGCATCAA ATGTACCAAT GATGATTTTA ACATTTATAT TACTCGTTGC AACCTTTGGA 120
 30 ATTGGATTTA CTACAAAGAA AAAATATCGA GAAAACGATT GGCTATAAGT TATATCGACA 180
 ATAACACGCG TTGATTTAAG ACCACACATG TTCATGATGA ACATTTAACT GGTTTATAT 240
 TGGCGCGTGT TTTTATTATT TAAGGTATAA AAGCGTAATA TGTTACCTAA TTGTTAGGAC 300
 35 TACATATTAC GCTTTTGGTA ATTATTTTGA TTTTCTTTTA AATCGTTGTT CATGTAATTG 360
 TATTAACGCA TCATGGTGGG GCTCTAAaTA ATCATtGCTA ATTcTTGATG GAGACCmCGA 420
 TttCCAACTA rGATkGAATT kGGACCmCTA AtkGTTAATG GTcctCCTAG TAAATTGGAA 480
 40 GCTTGTCCAT TaCTTCCaATA TAAAtAACCA ATCCGCCAGC AAAtCCCCaT GGTkGAAGTC 540
 TTGGCGTCAT ATATGCTTCT AAaTTACCTG TAGCAACTGA AACGATTTCA AGCGCTGCAC 600
 TACCATATGC CCTTGCACCT CTAGAATCAT TAACAATTTT TTTAAAGATT TCTCCTAAAA 660
 45 TTGGTTTTAGT TAACCAGTTC GGATTGATCC CAATAATGCT TTGTCTTAGA TTAGAATCAT 720
 TCAATGGTTT CAAGGGTTGG CTACCACGAT ATGCACCTTC CCCTACTTTA GCATGATATA 780
 50 AGACATCAGC CATAACATCA TATACAAAAC CTGCATAAGG TTTACCATCG ATATAAATAC 840
 CAATTGAAAT TGCGAAATTT TCTTGTTGAT GAACAAAATT CAATGTACCG TCTATTGGGT 900
 CAACAATCCA TACCGTACCT TTGGAAGTAT CGATGTCATG ACCATGCCCT TCTTCACCTA 960

(2) INFORMATION FOR SEQ ID NO: 747:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 865 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 747:

TTCTCGTCAC TGTACGTTGT ATTGCGGCAT CATCCATTAT GATACGTTCA GACATATTCT 60
 CACCCTTTCA AAATTTAGAA ACAAAAAACC TCATGTCTTT AATATCGACA TGAGGTTTAG 120
 TATATACAAT CAGCCTATTT ACATAGAAGA ATCGTAGTAT TACTACTTAT TCTTGCATAT 180
 GTGAAAGTGT TATGATCATT TTAGTATATA TCTATATTTT CATGTCTTTG ACGTCTCTCT 240
 GGACGCTCAA TTAAAGACTC TTTATGTTGT ACTTAAACTG TTATAAGGAT AATACTAATC 300
 AGGCGCTTTG TCAATCTATA TTGAAAAATT AACCATACTC AGTAAAAATG TTAACCTTAA 360
 TCTATTTTAT AATGTGTTTT CATTTAAAAA AAACGAAAAC GATAAACACT TATAGTTTAC 420
 ATAATAATGT TATCGTAATT ATAGCACGAC ACAATTATGC ATCTCTTTTT CGAATTGTAT 480
 CTAATAAATC TTCAAAGTCT TGTGGTAATT CAGCATGTCT TTCAATATAT TCACCTGTTA 540
 CTGGATGTTT GAATCCAATA AGTCCAGCAT GTAGAGCTTG ACCACCAATA TCCAATGTCT 600
 TTTTCGGTCC AACTTTTGGT TCACCAACTA ATGGGAAGCC AATATATTTT ATGTGAACAC 660
 GGATTTGaTG CGTACGTCCT GTTTCAAGTT GACATTCAAC AAGCGTATAA TCTTTAAAT 720
 GTTCTAGTAC GTTAAATGT GTCAGTGCTT CTTACCATC ATCAACAACA GCCATAGATT 780
 GACGATCATT TTTGTTTCTA CCAATTGGCG CATCGATTGT ACCGTAATCA TGAGGAATAT 840
 TCCCGTGGAA CTAAAnCGAT ATAGT 865

(2) INFORMATION FOR SEQ ID NO: 748:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 818 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 748:

ATAACATTGT GGAGCCTATG ACATTGATTT ATGTCTCGGT CTCAAATGTT CTTGTAAAAA 60
 AACTAAGTAT AGTTGAATTT TAAGTTAAAA AAATTGTTTT TGCAAAAATA AAATAATCCA 120

TTTTAGGTTT TCGCCTCTA AAAATCCTTG CGaTATTAGA GCGATGTCTA ATTATCAATA 240
 TGATTGAAAC TAAGAAACTA ACGACTAATA AAATATAGTC TTGAATGATA AGCGAGCCAA 300
 5 TCACACAGCA AATTGCTGCA ACGATACTTG CTAAAGAAAC ATATTTAAAA ATCTTCAATA 360
 CAATAAAGAA GATAATTGCA AGTATTAGTA AAAGTATCGG ATTGACTCCC AAGACGACAC 420
 CTGCACTAGT TGCAACAGCT TTGCCACCTT GGAATTTTAA ATAAACAGGA TAAACGTGTC 480
 10 CAAGTATAGC GAATAAGCCA ACAATTAAAC CATTTGTAAA AAAAGTACTA ATAGGGCCAT 540
 CTGCGTGAAC TTGTAACCAT AAAGGGAAGA AAACAGTTAT GAACCCTTTG AAAATATCTA 600
 15 GAAATGTTAC CAAGAATCCT GCAGGACGAC CTAATACTCT AAAGCTATTA GTAGCGCCAG 660
 TATTACCACT ACCAAATTGT CTAATATCTT TTTTGAAAAA TAATTTTCCA ATTACGAATC 720
 CACTTGGGAA AGCGCCGATA AGATAACTTA GTAGTAACAT GACGATTATC ATCATAAATA 780
 20 TTACACATCC TTTAATATCT TAGGACTATT TTATCATA 818

(2) INFORMATION FOR SEQ ID NO: 749:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 971 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 749:

ATATCCAATa ACTGTTcATT GTCTTGATAT TCCTTAAATG TTTcATAATG CTCATTAGAA 60
 ATGACAATTT CAAGCAACCA ACCCGTGCCA CTTTCCTCTT TATTAATTAT TACGCCATCT 120
 35 TCTAATTCAT ATTCTATAAT TCTGCCGTGT TCATTcACAA TTTGAAACCT TACTGCTTTA 180
 AAAGTTTTCA TATTCCCACA TCCCATTAGT TTAATATTTA TGATTTTTGA ATTATTTAGA 240
 40 AGATTTAAGG TCATTTcATG ACTAATTTCT TTAAATATAA CAAATAACGA GATGCTATAG 300
 CTATTAATTA TATAAAATTT GcCATTTTGa CCATTTTTAA GCTAGTAATT AAGATATAGG 360
 CATAGGAGGT GAATCACACA CTACATGCTA AATAAAATCG TAATTGTCGG GAGcTGACGA 420
 45 AAGACGCACA AATATTTGAA AAGGAGGATA GAAAAATTGC AACGTTTTGT GTTGCAACGC 480
 ACCGAAATTA TAAAGATGAA AATGGAGAAA TCGTCTGTGA TTACTTATTC TGTAAGCAT 540
 TTGGCAAGTT AGCTTCTAAT ATAGAAAAAT ATACTAATCA AGGTACATTG GTTGGTATAA 600
 50 CTGGTCAAAT GAGATCAAGA AAGTATGATA AAGACGGACA AACACACTTT GTCACTGAAT 660
 TATATGTTGA AACAATAAAA TTTATGTCCC CTAAATCCCA AAATAATGAA ATTCTCTCAG 720

TCCAATTATC CTAAACATCC TTAATATACA TTTAATCCAT CCTAAATTTT TTATAGATCT 840
 AATTAACCTG AAATATACTC ACTTAAAAAC GACTTACATG ACCTAGTACT GTTGGTAAGG 900
 5 TCGnCTTTTG GTGTAGTTTT CTAATAGAn AATAGACnTA GGTGCCCCAA CCGATTACAT 960
 AAAAAATTGC C 971

(2) INFORMATION FOR SEQ ID NO: 750:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 832 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 750:

20 ATAGATTACT CTTTGTATCT GTAGATCCTA CTGTAACGAC ATTGTCCATA GATGCAGGAA 60
 CATCTTTCAC TTCGCCATTA CCTTGATATT CACGCTGTAA TTTTAGTTTC TGTGTCAT 120
 TGACATCAAT ACCATCATT CCAGCTGCAG CAACAACGAT AGATTTTTTC TTCTGGCGT 180
 25 AATTGATTGC TTTCTGTAAAC GCATCGTATT CTACTTTTTT ATCTTTTCTA AATGTTTGAT 240
 GGTCATTTTT GTCCAAAATA ATATAACTAC CAACACTAAT ATTAATGACT TGaTTTCCAT 300
 CATTTGCAGC TTGAACAATC GCTTTTGATA CCCAAAGCAG TTCTGTTTTT TTACTIONACAA 360
 30 ACACGCGATA CATTGTAAAT TTGTTATTCG GTGCAACACC TATTAACCTA CCATTAGCAC 420
 TCGTTTGACC CGACACCATC GTGCCATGTC CTTTCCTATC ATTGACATCG TGAACATCAC 480
 CTGTTTCCTC CGGTTTCAGTA CCTCTAAAAC CGTTTAAAGG TACTAAATTT TTAGAATCAG 540
 TCGAGAAATT ATTTTTCAAA TCGTCATGGT TTTTCATCAC ACCTGTATCT ATGATTGCTA 600
 TTTTGGTGTT AGCATGTTTT GGCAATCAT CATACGATGC ACCATTATTG GTTATTTTAT 660
 40 TCATATCCCA TTGTCTTGAA AATAATGACT CATTGATGT TCTGTCTATT GTTTTCTCGC 720
 TAGTAATACA AGTTGAACAT GTGGCATTGA TATATTTAAc ATCATTTTTA TAGTTTGCTA 780
 AAGCATTAGC ATGCATTTTC GTCATTTTAA TCTGTGCCAC ATGGAATTCC GG 832

45 (2) INFORMATION FOR SEQ ID NO: 751:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 475 base pairs
 (B) TYPE: nucleic acid
 50 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

GTAATATCAA TCTCTTCATA AGCTGAATTA TTTTCATGCA CTTCTTGATG TGATGATTTG 60
 TCACGAACCG CTACAACTAA CATTTTATCG TCTAAAATAA GTTGTTTATA TTTTCTAAT 120
 5 TCATCAGGCG CTAAGTTGTA GCGTGATAAA ACTGCATGTT CACCATCTTC TCCTGTAAAC 180
 AGTTTAGTCA TTCTATCACT AAATGTTCCA CTTGTTGAGA TAAGGGAGAT TTCAGAGTCG 240
 TGTAAGTCAT TTAGGTGTAA TTTACTTTTA CTAATAATTG TTAGCTCTGA TTCTAAATAA 300
 10 CCTTCAGATT TCTTTTGATT GATTACGTTG TATAATTCGC CAGTGTCATT TACTACAGTA 360
 ATATCTGCCA TAGTTGTCGC CCCTTTAAAA ATTTGTTTAT tTAATCTTTT ACCCTTCTTA 420
 15 TnATAAAGTA AAACCCTTAC ATTATTAAGT nATAAGTCTT CATTGCGATT AAACG 475

(2) INFORMATION FOR SEQ ID NO: 752:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1019 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 752:

GCGACACTTG TGAGTTCTCC AGCAGCAAAC GCGTTATCTT CAAAGGCTAT GGACAATCAT 60
 CCACAACAAA CGCAGTCAAG CAAACAGCAA ACACCTAAGA TTCAAAAAGG CGGTAACCTT 120
 30 AAACCATTAG AACAACGTGA ACACGCAAT GTTATATTAC CAAATAACGA TCGTCACCAA 180
 ATCACAGATA CAACGAATGG TyATTATGCA CCCGTAACCTT ATATTCAAGT TGAAGCACCT 240
 ACTGGTACAT TTATTGCTTC CGGTGTAGTT GTAGGTAAAG ATACTCTTTT AACAAATAAA 300
 35 CACGTCGTAG ATGCTACGCA CGGTGATCCT CATGCTTTAA AAGCATTCCC TTCTGCAATT 360
 AACCAAGACA ATTATCCAAA TGGTGGTTTC ACTGCTGAAC AAATCACTAA ATATTCAGGC 420
 40 GAAGGTGATT TAGCAATAGT TAAATTCTCC CCTAATGAGC AAAACAAACA TATTGGTGAA 480
 GTAGTTAAAC CAGCAACAAT GAGTAATAAT GCTGAAACAC AAGTTAACCA AAATATTACT 540
 GTAACAGGAT ATCCTGGTGA TAAACCTGTA GCAACAATGT GGGAAAGTAA AGGAAAAATC 600
 45 ACTTACCTCA AAGGCGAACT ATGCAATATG ATTTAAGTAC AACTGGTGGT AATTCAGGTT 660
 CACCTGTATT TAATGAAAAA AATGAAGTGA TCGGaATTCA TTGGGGCGGT GTACCAAATG 720
 AATTTaATGG TGCGGTATTt ATTAATGAAA ATGTACGCAA CTtCTTAAAA CAAAATATTG 780
 50 AAGATATCCA TTTTGCCAAC GATGACCAAC CTAATAACCC AGATAATCCT GATAACCCTA 840
 ACAATCCTGA TAACCCTAAC AACCAGATG AACCAATAA CCCnGACAAC CCTAACAACC 900

CAATTAAGTT CGTCTAGATA AAATAGGAAG CAAAGTCTTA GCAACGTAAA ATATTTTGA

1019

(2) INFORMATION FOR SEQ ID NO: 753:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 533 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 753:

ATTCTTATCC CAGGTAGGTG nTTTACTTCT TATATTAGGT GCAATAACTC ATGCCACTCA 60
 TCTTGTGGCA CAACATGAaT CGCATTTTCA AAAATTGCAT GTCCTGCTTG ATCAGTCAAA 120
 CCGGCAGCAT GATCAAAATG CATATGTGTC ATTAGCACAT AATCAATATC CTTTGGCGTT 180
 AAATTATAAT TTGCCAAATC AGCAATTATA TGACTTTCTT CATCTACTCC AAAATTACGT 240
 AATTGCTTTT CAGATAATTT ACCATTACCA ATACCTGCAT CTATAATCAA ATTATATTGA 300
 GCCGTTTGAA TCAAAATTGG ATGTGTCGGT AAATTGATTT GATTTGTTT ATTTGCATTG 360
 TATTGCTTTG ACCACAACGG CTTCGGAACA ACACCAAACA TTGCACCGCC ATCCATTTTT 420
 GTATTGCCAC CATTTAGaTA ATGAATAGaT ATATCCCCGA TTTTCATAAC ATCACCTATT 480
 CTTTCTGTAT TCGTTATTAC AATTAGCATG TGTTTATTAC ATCATATCAC TAT 533

(2) INFORMATION FOR SEQ ID NO: 754:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1225 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 754:

ATCCCCTGCA AGTGATAAAA TTATTGAAAA AGGCGACATG ATTACATTAG ATTTTGGCGC 60
 GTATTATAAC GGCTATTGTT CAGATATTAC TAGAACATTT GCTATTGGAG AACCAGATCC 120
 TAAACTGAAA GAnATATATC AnATAGTACT TGAATCTCAA ATGAAAGCAA TTAATGAGAt 180
 TAGACCTGGC ATGACTGGTG CAGAAGCTGA TGCCATTTCA AGAAACTATt TAGAGTCAAA 240
 AGGGTATGGA AAAGAATTTG GACATTCACT AGGACATGGT ATTGGTTTAG AAATCCATGA 300
 AGGGCCAATG CTGGCTCGTA CGATACaAGA TAACTTCaA GTTAACAACT GTGTTACAGT 360
 AGAACCTGGT GTTTATATAG AAGGTTTGGG CGGTATAAGA ATAGAAGATG ATATTTTAAT 420

AGCGTGTAAT ATGAGGAGGA AACTGAATGA TTTCGGTTAA TGATTTTAAA ACAGGTTTAA 540
 CAATTTCTGT TGATAACGCT ATTTGGAAAG TTATAGACTT CCAACATGTA AAGCCTGGTA 600
 5 AAGGTTTCAGC ATTCGTTTCGT TCAAAATTAC GTAATTTAAG AACTGGTGCA ATTCAAGAGA 660
 AAACGTTTATG AGCTGGTGAA AAAGTTGAAC CAGCAATGAT TGAAAATCGT CGCATGCAAT 720
 ATTTATATGC TGACGGAGAT AATCATGTAT TTATGGATAA TGAAAGCTTT GAACAAACAG 780
 10 AACTTTCAAG TGATTACTTA AAAGAAGAAT TGAATTACTT AAAAGAAGGT ATGGAAGTAC 840
 AAATTCAAAC ATACGAAGGT GAAACTATCG GTGTTGAATT ACCTAAACT GTTGAATTAA 900
 CAGTAACTGA AACAGAACCT GGTATTAAAG GTGATACTGC AACTGGTGCC ACTAATCGG 960
 15 CAACTGTTGA AACTGGTTAT ACATTAAATG TACCTTTATT TGTAACGAA GGTGACGTTT 1020
 TAATTATCAA CACTGGTGAT GGAAGCTACA TTTCAAGAGG ATAATCTCTA ATTTGTAAAC 1080
 20 AAATAGCTTG TATTCATAT ACTGATTTAA CGTAAGAAAT TCTAAATAAG TCTCATAAAG 1140
 CTATTGCCTA AAATGATTAT AGGTTATATG CTGATATGAG GCTTTTATT TTTAAATAA 1200
 TTTTAAAAT ATAAAACGAA TCGTC 1225

(2) INFORMATION FOR SEQ ID NO: 755:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1265 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 755:

ACAAACAAAT CACTTAGTTA AAATTGACAG TGCAATATAT TCCGATAAAT TATTCAACAT 60
 TGTAGAAAnn AGAATTGATA CACCAGATAT TGGCTATAAT ACAGTGGTTT TATCAGAAAA 120
 40 ATGAGTGTAG AAATTAAAGG GATACCTGAn GTGTTGAATA AATTAGAATC GGTATACGGT 180
 AAACAAGCAA TGCAGGCTAA GAGTGATAAA GCTTTAAATG AAGCATCTGA ATTTTTTATA 240
 AAGGCTTTAA AGAAAGAGTT CGAGAGCTTT AAAGATACGG GTGCCAGTAT AGAAGAAATG 300
 45 ACTAAATCTA AGCCTTATAC AAAAGTTGGT AGTCAAGAAA GGGCTGTTTT AATTGAATGG 360
 GTAGGTCCTA TGAATCGCAA AAACATTATT CACTTGAATG AACATGGTTA TACAAGAGAT 420
 GGAAAAAAT ATACACCAAG AGGTTTTGGA GTTATTGCAA AAACATTAGC TGCTAGCGAA 480
 50 CGTAAGTATA GAGAAATTAT AAAAAAGGAG TTGGCCAGAT AAATGAATAT ATTAAACACC 540
 ATAAAAGGAA TTTTATTATC TGATGCAGAG CTCAAAACAC ATATAAATTC TAGAATATAC 600

TATGATTTGC CTTGAGACTT TATGTCTGAT AAATATCTCA GTGAAGAATA CTTAATTCAA 720
 ATAGATGTAG AATCTTCAAA TAATCAGAAA ACAATTGATA TAACAAAACG AATAAGATAC 780
 5 CTGTTATATC AACAAAATTT AATTCAAGCA TCTAGTCAGT TAGATGCTTA TTTTGAAGAA 840
 ACTAAACGTT ATGTGATGTC GAGACGATAT CAAGGCATAC CCAAAAATAT ATATTATAAA 900
 AATCAGCGCA TCGAATAGGT GTGCTTTTTA ATTTTTAAGG AGGAAATAAG CAATGGCAGA 960
 10 AGGACAAGGT TCTTATAAAG TAGGTTTTAA AAGATTATAC GTTGGAGTTT TTAACCCAGA 1020
 AGCAACAAAA GTAGTTAAAC GCATGACATG GGAAGATGAA AAAGGTGGTA CAGTTGACCT 1080
 AAATATCACA GGTTTAGCAC CAGATTTAGT AGATATGTTT GCATCTAACA AACGTGTATG 1140
 15 GATGaAAAA CAAGGTACTA ATGAAaGTTA AGTCcTGaCA TGaGTaTTTT CaATATTCCa 1200
 AGTGaTGaTT TAAaCACaGT TaTTGGaCGT ACTAAAGATA AAAATGGGTA CATCTTGGGT 1260
 20 AGGAG 1265

(2) INFORMATION FOR SEQ ID NO: 756:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 1111 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 756:

CATATACCCG GGTTCCAAGA ATCCTCTATC CATATGGTCC CCCAATTTTG ATTCCACCAT 60
 ATTGTTAAAT ATCACTTTCC CAGCCTACTT TTTTATnCAG TTGGGCTCTC TAAAATTGTT 120
 35 TTGAAATCCA GGTTGAACAT ATTTCCAGTG TATGACCAAT CGAAACATTT GCACCAATAA 180
 GGCCGCCAAT TTTTCCTGTA TCATCACCAG TAACATTACC GTTGAATCCA TAAGTTAAAG 240
 TACTCATATA CTCTTTTGTA TCAATCGAAT TTCTTGATA GTAATCAGAT ATTTGAGCTA 300
 CTTCAATTATC AGGTAGTTGC AACTGTACCT TAAAGGCTGA AGGCCAGGCT AAACCACTTT 360
 TGTTAGCACC TTCTTCGCTA TAAACTCTAT ATTGACCAGC AATGGTACCT TTCGTTCTAA 420
 45 TAACTAGCAG TTTTTTATTA TGATTTTTAT CATCGATAAA ACTATAAAAT ACTTTTTTGT 480
 GCATGCCATT TTCTTTATCA TAAGTGAATA AATCACCTGT TTTTACTGTA GTATTGCTTC 540
 CAATATCTGT AGTACCGGTT TTAATATTAA TATCAGAATC TGCGGCATTA GCGACAGGAT 600
 50 TCATTAATAT GGAACCTAGC AATAGTGTTG TTGTTACTGA GCTGACTATA CGTGTTTTCa 660
 TTTTCATCAT CCTTCTATTT TTTAAAACGA TTTGAGGAAA CAATAATCAA TATGTCAATT 720

GTAGCAACTG ATAAATTACT GAGTGATGAT GAGTGATTAT TTTAAGAATA TGTTTTTAAAC 840
 TTTTATTTAA AATTTGAAAG GAAGCATTTTC AATTTTCGAGG GTTAGTCAA GTTGAATAAA 900
 5 TTCTTTATGA AACAAGGAAA AGACATAGCT AATTTtATTG ATTAATTTCT TTAAAACTAA 960
 TGATTTGTTT GATTTAAAAA TGTAATCGAT TACAATATAA AAATACAAAT ATCTTAGAAT 1020
 10 TAAATCAATT AATTAATCTAT TAAATAAAAA TTAATCTATAT ATTAATCTAGT GTAAATTAAT 1080
 AAATAGAAAT AGAGAAAAAG GGTATTAATT A 1111

(2) INFORMATION FOR SEQ ID NO: 757:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 466 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 757:

TATCTATTGT ATGTAACAAT AGGTACATAA TATTTTTAGG GTGGGTTATA TGAGCATAAT 60
 25 TACAAGATTG TTTAATAACA GTGATTTTGA AAAATTAAAT CAACTATGTA AATTATATGA 120
 TGATCTAGGT TATCCAACAA ATGAGAATGA TTTAAAAAAG AGACTAAAGA AAATAACGAA 180
 TCATGATGAT TACTTCCTAC TGCTTTTGAT AAAAGAAAAT AAAATAATTG GTTTAAGTGG 240
 30 TATGTGTAAA ATGATGTTTT ACGAAAwAAA TGCAGAGTAT ATGAGAATCC TTGCGTTTGT 300
 TATACATTCT GAATTTAGGA AAAAAGGTTA TGGAAAGAGA TTATTAGCTG ATTCTGAAGA 360
 35 ATTTTCTAAA CGGTTGAATT GTAAAGCmAT AaCACTAAAT AGTGGTAATA GAGATGAnAG 420
 ACATCTGCAC ATAAACTATA TAGTGATAnT GGGTATGTTA GCAATA 466

(2) INFORMATION FOR SEQ ID NO: 758:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 402 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 758:

CGTACAGCAT AACCAAATAC ATATCTGCCA AAATCGCCAT ATGCCCCAGT TCCTCTTCCA 60
 50 TATTCCGTTG TCATTGAGTT TTTAATTTTA TCGATAGAAA AATGTAAATG GCTATCTAAT 120
 TTGTTTTTTTA AAGATTTTAT GTAATCtCTA TATTTAAATT CGAATATTCT TTTTATACC 180

AACTAATATA TwCAATTGTA TGCCTAGCAT AATCTCTCAT TAAAATATGA GGATATACCA 300
 TTTCTTTATC AAATATtTCT TCATAAATAT AATTAGCAAT CTCTATATGT ATTtCACAAA 360
 5 TGTCGATTGCG AAGTGTCGCC CCTAAAACAG rAGCATATAA TC 402

(2) INFORMATION FOR SEQ ID NO: 759:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 338 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 759:

AAGTTACTCA ACAGCCATTT GACACGTCTC GATTAGAGCG ATTAGGTATA ACCGAGCGCC 60
 20 AAATAAAGA CATGTATCGT TTATTAGGAC TAGCCAAATA TGAAGATCGA TTTGTTATTC 120
 CAACATCACA CAAAGAAACC TATTTAGATA CGTATCACGC ACAAGGTAGT ACAGGATACA 180
 ATTACGGCGG CGAGCATTTT GGAGATAACT GTGAAGGCTG TGGCGTTGCA GTAGGTTTCA 240
 25 GGAAAAGTGG TCAAGAAATT TATAATGGAG AATTCTATGG AGGGATTTCG GTGGTTAATT 300
 TCGATAATTT AAAAAATATC CAAGAAAGTT TGGGThnn 338

(2) INFORMATION FOR SEQ ID NO: 760:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 399 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 760:

CTCTATTATA TTTAGAGTTA TAGCTATTGC aGTTGTTTAT TTATTGAAAA TAAATGTACT 60
 40 ATCATTAGtT TTAGCAAGTG TATTAGGCAG TTTgGTATct AGGCTACTAT TATCTATTAT 120
 TTTAAATTTA CCTGTGTGGG TAGTGTTGTT AAaCGCGATT CCAGGCGTAA TATTCACTTT 180
 45 AATTGTAGcT ATTCCTTTAT ATCTCACATT GAGAAAAAGA ATGGCAGTAT TACTAAGATA 240
 ATAAATCAAA ACACGGTCGT CACAATTACT GTTGGCGACC GTGTTTTACT AGCTATTTAT 300
 TGTTTTCACT TTCTTTTGTA TCTAACAATT TCACTTTGTG ATTTTCCCAA TCAATTTTCA 360
 50 ATGTTGaTTT AAATGTTCTA GTTTTAAAGT TTTTATAAT 399

(2) INFORMATION FOR SEQ ID NO: 761:

- (A) LENGTH: 639 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 761:

10 GCATATnCAA AACAAATAGCT GCTTTAGGTG CGGGGGCTAT TAGCGTTATT TCTGCACTAA 60
 CAGGAGGTTT AGTTGGCGCA GGTGTTGGTG GTTTCCTTGG ATCTATAGCT GCATCGAATA 120
 TTGATACTAG TAAGGGAATA TATATAAAAT TAAAACTAA AAAGTATGCA GCCGGGGAAT 180
 15 ACGTTCTGAC AGGAGAAAAA TGGGGATATC AGTAAGGGTG ATTTTATGGA TAGATTAAAA 240
 TATTCACCTTA AAGTTGGAAT TTTAGCATT TATTATTTT GTACTTTAAA TTATTTAGTT 300
 CCAATGCAAA GCAATGCTTT TTCAATAATT ATATATTCGG CAATTTTTCG TGTGTTACTT 360
 20 ATGCTTTTAG TTTATATATT TTTAGGAATT TTAAAGAAAT GACATGAAAC AAATTAGCAT 420
 TGGCTATGAA GAAATCTATG GGGATAGAAT TTTTCATAGC CATTTTTTAA AAGAGCATGA 480
 25 AGTAAAAAAT TGGAAAACCG TCAATCAAAT AATTGAAAAA GAACACTTGG ACAAAAATGA 540
 ATATGnAAGC GGAACCGCCG TTATTTTCT TTTGCAGGAT CGTTAGATTA GATTnCGGTT 600
 GTATAGTATA ATGAAAAATA TTATAATAAA TTTATAAAA 639

(2) INFORMATION FOR SEQ ID NO: 762:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 852 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 762:

40 nTGTTTCGTTG TCTGGATCCA ACGTAAACAG TCGCTTCATC TAATACAATG ATAGGCGCAT 60
 CTTTAAATAT CATTCTTGCA ATAGTGA CTC GTTGTTTTTC ACCACCAGAC AATTTATCTC 120
 45 CCACTGTACC AACATTTCGTA TCATATCCAT CTGGCAACTT TTCAATAAAT TCATGACATT 180
 GTGCTAACTT GGcAGCTTTT TCAACTGCCT CATCCGTAGC TTCTGGATTG CCAAGTTTAA 240
 TATTTTCTTT AAAAGTAAGA TTTAATAAAA AGTTATCTTG TCCAACAAAA CCAACTAAAT 300
 50 CGTTAAGTTG TTTCGATTCA ATATCTTTTA TATTTATACC GCCAATCGTA ATTTACCTG 360
 AAGTCACATC CCAGTATCGT GATATAAGCT TGGCAATGGT TGA CTTACCG CTACCAGaTG 420
 CCCCACGAT AGCTGTGAAA TTATTTTCTG GTACTGTAAA TGATAAATGC TTAAAGACCA 480

55

GAGGCTTCTT AAATTTTGTT GACAATACTA ACTCTTCTAG ACTTAATATT TGATTCACTT 600
 CAGTTAATGC GTATTGTATA GACTTTAAAT GATTACATA ATTAGTAAAA TTCTTAATCG 660
 5 GTGCTACTAC ACCTAAAGAT AATACGATGC ATAGGAAAAA TTCCGCATAG TTTAATTGGT 720
 TGATAGATAT CAAATACATG CCGACCGGTA AAATCCCTAA AAATGTTGAA GGTAATACAC 780
 TAGCTCCTAA ATTCATATAC CCCCATGTAT TTTTAAACCA ATTCAAAGTG TGAATCTTAT 840
 10 AATTATCTAC TG 852

(2) INFORMATION FOR SEQ ID NO: 763:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 852 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 763:

CTCTTCATGC GTCATACGTT GTGTCGATTG ATCAGTTGTT TTGTCTAAAT CACTAGCTTT 60
 25 AAATTTAGAT TGATTTGATT GACGTGTCGT AAATnGTTGT TCCTTTTGTT GCGGTTTGCC 120
 TTTTTTCTT GATCTTATTA AAAATAAATT GATAACCCCA ACAATAATGA GCGCTAAAAT 180
 30 AATGTAGCTA ATAATGAAGG TCGTAGTCAT TTAATGACCC CCTTAATTTT TATGGATTTT 240
 TACTTCAGCG TTCaTTCCaG GAACAACTTG TTTAGACGGT TcTGATTCTA GAGTGATTTT 300
 AACAGGTATT ACTTGAGAAA CTTTAGTGTA GTTACCATCA CTATTTGATG ATGGCATTA 360
 35 TGAAAgtTG CAGCAGTTGC TTTTCCAATA CTATCAACTT TACCTTTAAT AGAAGCTTTT 420
 TGACCGTCAA TAGTCACATC AACATCTTTA CCTACTTCAA CATCTTTAAT ATCTTTTTCG 480
 TCAATATTTG CTGTTACATA TAAATCATCT AAATTGTATG CATAAGCGAT TGGGTTACCA 540
 40 GCTTGACCA TTGAACCTTC CATACCATCT AATTTGGCAA TTGTACCTTT TTGAGGCATT 600
 TTAAGATCCA TATCTTTCGT TTCGCCATCT TGACCTTGTA CAGTAACAAT TGCTACTTTG 660
 TCACCTTTAT CGAGTTTGTC ACCTTGTTTA ACATTAAGTG ATTTAATTTG TCCAGATGCA 720
 45 GGACTTGCTA TTTTAATTTG ATCGCCATTT ACTTTTGCAT TATCAGTTGT TACATAGCTT 780
 GTTGTTTTAT TCCAAAAATA AAAGCCAGCA ATCCCAATGG CTAACnGTAC AACAAACCGTA 840
 50 ATGACATTnA AT 852

(2) INFORMATION FOR SEQ ID NO: 764:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 747 base pairs

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 764:

	ACATATTCGA CATTCAATTTT AAATTGCATA TAACTACATT AACCATTTCAT TGTGCAGCGC	60
10	CTGTTGTTTA GATGATCATT TATTGACTTT TTGCTCTTAT nCCAnGCAAT TTTTGTATTT	120
	ATTGCTTATA ATACATTTTA AGACAAATGT TTGTTTCAAC ATCGCATGCG ACATCATTAA	180
	yTATTCATTT AAATTTATCC AGTTTCTATT TGTCTGCAAT TGCTGAAAAT TAAAGGAGCT	240
15	TATTTTAAAT AATGGAACAA ATTATCACTG AATTTATTAG CCGTTTTGGG TATGCAGCCA	300
	TTTTTATATT AATTTkATka GAAAATGTAC TACCTaTCGT aCCATCGGgA AATTATTCTG	360
	ACATTTGCTG GTCTTATGTC TGTTAAATCA CATTTATCAA TTTTAACTTT ATTTATTATT	420
20	GCAACTATCG CATCGTTTAT AGGGCTGTTA ATTTTATATT ATATCTGCCG TTTGATTTCA	480
	GAAGAACGTC TATATCGTTT TATTGATCGA CACGGTAAGT GGATTAAATT GAAAAGTAAG	540
25	GATTTAAAGC GAGCAAATGA TTGGTTTAAA AAGTATGGCG TATGGGCTGT ATtkATCTGT	600
	CGTTTCATAC CTGTATTACG TGTAtTGATT ACCATTCCAG CTGGTGkaAA CCGCATGAAT	660
	GTTGTGACaT TtACCGTTAT TTCATTAATA GGTACTACAA TCTGGAATTT CGGTTTAATT	720
30	TTACTAGGAC GCACTTTGAG CGATAGC	747

(2) INFORMATION FOR SEQ ID NO: 765:

(i) SEQUENCE CHARACTERISTICS:

35	(A) LENGTH: 820 base pairs
	(B) TYPE: nucleic acid
	(C) STRANDEDNESS: double
	(D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 765:

	TTTACCTTTT AACCAATCAT GCATTAATGC AATGTGTACT GTCTTAACAA ATGTTGCATA	60
45	TtCATCTTCT GCACTCCACT TTTTCAATTC CTGTTGATTA ATGGCATGTT TTTCTCCATT	120
	TTCCAACATA TTGACATACA ATTTATAATG TTTTTCAACT GCCTGAATAA AAGCGAGTTG	180
	ATTTTTATTT AAATGTGATT TTAACTTTTC TAAATCTGAA TTAATAAAGT CTTCTATAGT	240
50	CGAATAAGAC ATATCTTGGT ATTCAACTAC TGCATTAATT TCATCTAATA ATTGCGATTG	300
	TGATTTTAGC GTTATATAAC TCTCGTCTCC ATAAGATATT TCTGTAGTAG CTGCTGTAGT	360
55	AGGATTTGGA GAACTGACTA AAATATGCTC GCCTAATAAT GCATTTATCa AACTACTTTT	420

TGTTCGTGG ATATCTTGCT TTGTACGCTT GAACAAAGGC ACATCCGAAA TTATATCAAG 540
 CGCTTTTGA ATATCTATAG ACATATTTGT TGTAGCTGTA TTTTGATTGA GCTGCTGATT 600
 5 ATCAGGATTA TCCTGAGCAT TATCAGTAGC CACTTGATAT GTTGTCTCTT GTCGACCTAT 660
 TAATTTATCT AGAGATTCAT CTAAATGAAT ATAGTAGTGA CGATAATTCT TAGTCGTCAA 720
 TGAAGGACGC AGCTCATTGA ATTCTGTATA ACGTTGATAT TCTTTTAAAT CATCACTTTC 780
 10 TTCTGTTGGn AATTCATCTG CCTGCACATT TTCTATnATT 820

(2) INFORMATION FOR SEQ ID NO: 766:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 672 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 766:

TCAACATGAC ATTAATTTAA TAGCGATGCA TACAAATTTA GATGTAAATC CGTATGGTGT 60
 25 CAATATGATG TTGGCGAAGG CGATGGGTTT GAAGAACATT TCAATAATAA ATAATCAACA 120
 AGATGTATAC TATAAAGTTC AAACATATAT ACCTAAGGAT AATGTTGGAC CATTTAAAGA 180
 TAAGCTTAGT GAAAATGGAT TAGCGCAAGA AGGTAATTAT GAATATTGTT TCTTTGAAAG 240
 30 TGAAGGAAGA GGGCAATTCA AACCAGTTGG TGAAGCTAAT CCAACAATAG GACAAATTGA 300
 TAAAATTGAA TATGTAGATG AAGTTAAAAT TGAATTTATG ATAGATGCAT ATCAAAGTC 360
 35 AAGGGcTGAG CaATTAATTA AACAATACCA TCCATATGAA ACACCGGTAT TTGATTTTAT 420
 TGAGATAAAA CAAACATCCC TTTATGGACT TGGCGTTATG GCAGAAGTGG ATAATCAAT 480
 GACATTGGAA GATTTGCGAG CTGATATTAA ATCTAAATTA AATATCCCAA GTGTCCGTTT 540
 40 TGTGTTGak TCTAATCAGA AAATTAAACG TATTGCaATT ATTGGTgGTT CAGGTATTGG 600
 ATATGAakAT CAAGctGTCC AACAAGGcGC AGATGTCTgT TACGGTGATA TTAAACATCA 660
 GATGCCTAGA TG 672

(2) INFORMATION FOR SEQ ID NO: 767:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 403 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

GAAAAAGTTA AACCTACTGT AACTACAACA AGcmAAGTTG AAGACmATCa CTCTACTAAA 60
 GTTGtMAGTA CTGaCACAAC AAAAGATCAA ACTAAAACaC AAAGTCTCA TACAGTTAAA 120
 5 ACAGCACAAA CTGCTCAAGA AAAAAATAAA GTTCAAACAC CTGTTAAAGA TGTTGCAACA 180
 GCGAAATCTG AAAGCAACAA TCAAGCTGTA AGTGATAATA AATCACAACA AACTAACAAA 240
 10 GTTACAAAAC ATAACGAAAC GCCTAAACAA GCATCTAAAG CTAAAGAATT ACCAAAAACT 300
 GGTTTAACTT CAGTTGATAA CTTTATTAGC AcAGTtGCcT TCGCAACACT TGCCCTTTTA 360
 GGTTCATTAT CTTTATTACT TTTCAAAAGg AAGaaTCTAA ATA 403

(2) INFORMATION FOR SEQ ID NO: 768:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 483 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 768:

TTCAATGCTC GTTTtGCTTG CGTTAGTAAT TTCTAACATA TTCATTcACA TTTTGGAGCC 60
 TAACTATCA ATCACCCTC AAATCATCAT CGTTTTGATT TTAATTGAAG CACTAATTGG 120
 30 ACTGCGTTTC TTGAAAGCGT ACGATGTTAA GCGTGGCAAA GATAAAGAAA ATAAGAAAAA 180
 TAGTAAGGAT TTCGTTAAAC TAAAATCAAT TTTAGTAGCA ATTTTATTTA CATCATTGGC 240
 GCTGACAGCA GGTACTGTAG CTGATATATA CGGTTTCACT GACTTAGGAA ATACTAGAAG 300
 35 TGATTTAATC GTTTGGAGCA TAGGTGGTAT TATATTTGGC CTCGTATGTT ACACAATGGA 360
 AGATAAAAGA TAACGATAAG GAGCTGGCGA TTATAAGCT AGCTCCTTTT TTAACTTaTA 420
 TATGTAAAGA aCTaTCCTAA GGGkTTTTAA TCATATGTCA ATAATTTCTA TAATACATTA 480
 40 TTA 483

(2) INFORMATION FOR SEQ ID NO: 769:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 769:

ATTATATGTC TGATGTATTT CATGTCGTTA AAAATAAAGG TACGGAAGAT TTAAAGAAG 60

GGATGATGCT TGAAGGTGAA AAAATCAAAG CTTTTTATGA AGATATGCCA CCGTATCAGA 180
 CTGTCAAAAA AGGAACGATA CAAATTAAGC GTGATGGCAC ACCTATTATC CTATTAAATG 240
 5 TCATTATACG CTnGTAGCTA CCCGCAAATC GGTACAATCG CAGTTATCAT TTACGAATTA 300
 GCACAAAACC GCAGGATCAC GTTGAATTCC ATTATAGTAT TTACGGCTGA AGACTGTAAG 360
 10 nTAnACTGGT AACCATATCA TGGATGATTG ATCATAGATG 400

(2) INFORMATION FOR SEQ ID NO: 770:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 750 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 770:

ATCTCTTCTA CTTCTTTTAC AAATTGAGAA CGTCTTAAAA TGGCTTTTAC ACGGGCAACA 60
 ACTTCTCTAG GTkAAAAAGG CTTAGTCATA TAGTCATCGG CACCTAATTC TAAACCTAAT 120
 25 ACCCGATCAA ATTCATCATT TTTCGCCGTT AACATTAATA TAGGGACTAA ATTTTTATTT 180
 GTTCTTACAG TCTTACATAC GTCAATGCCA TCTTTTTTAG GTAGCATAAC ATCTAAAATA 240
 ATTAAATCTG GCTGTTCACT TTCTACCTTT TCTAAAGCCT CATCACCATC AAATGCGACA 300
 ACAACTTCaT AACCAGCTGk TTCTArGyTA TATTTAAGTA ATGgTTaCGa TTGaATGtTC 360
 GTCATCTACT wCCaACACTT TTTGCGACAT GGTATGCCTC CCTAACTtAk AATTATATTT 420
 35 cATTATAACC GAACTATTTA TAAAAATAmC ATCCTACACA TTATCTTTTAC ACATTTTTTTA 480
 CATTACTTTA CATATAAATA AAATACTTCT TATATTTCCCT TCTmTCATTT GCATGACTTA 540
 CTCTGGGACA ACGAAATAAA TTTTGTAATA ATAGCATTTT TATCCCACTA CCTATGCATG 600
 40 AGTTTTACTC ATTTATTCCT AAGCTTATGT ACATATTCGC TTTGTCTAAT GTGTAAGAAA 660
 CACTACATAA TCAATCATTG GTGACTCTTT ATTATTTCTA TCCTGTTGCC AaCTTCAATT 720
 CATTTAAAAA GGCGAACCTA GCAATTAAAG 750

(2) INFORMATION FOR SEQ ID NO: 771:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1462 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

	ATTTAATTAT TATTTTTCCA AATCAATACG ATATAATTTT ATGTTTTTAT CTTTTGGTGC	60
	TGaGGCAAAT TGATAAGtCG TTTTGCCTTT TTCAATATAT CCAAAATTAC CAGCAACTTT	120
5	GCTATATTCC GTATGTGTTA CTGCTTTGCC AACATAATTT TTAACAGCTT GATATGTTGG	180
	ACCATTAGCA TCATTATACA TCATTGAAAT ATGAGTTACT TTACCATTGT TTTTCTTACC	240
10	ATCAGTAGTT ACTAATAACA TACCTTTTTT AGTATGGAAT TCGTAATAAT GTTCAGTTCC	300
	ATCTTCATTG TAAGAATACA TCGGATTTTT GTACTTAGTT AAAACATCTT TAATAGATTC	360
	GCCAATTTTC ACATTTTCTA ATGACTGATC ACCCTTAATT AATTGTTTAA CAGTATCAAT	420
15	AGAGTTGCCA CTTGCTGCTT CGGCACTAGT GTTCACTAAG CCTACTCCCA TTACAACAGA	480
	ACATGCAATT ATACTTGCCG TTAGTAGCTT TTTCATAAGC ACTCTCTCCT TTTATTTATA	540
	TCGTCTTG TG CTCACAACCA TTATACAACA ATCATTCTA AAACAACAGT CATATTACAA	600
20	TTATATTACA AATAATAATT ACTACTTTTA TATTTCACTT ATCACTAAAA ATTAAACATG	660
	CTTTTCATCG TGATGTTTGT TGATAAATGC AGCTGTATCT TCGACGAATC TTTCTTGCTC	720
	TTCAACAAAT GGAATGCAC TTGATTCTTG ATATACITCA AAGTCCGCAT TTTGGATTAA	780
25	ATCAGCTACT TCTTTAGCTT CTAATCTTGT TGTTCTTTCA CCGAATTCTC CTGCAATAAT	840
	TTTTGTGCGT ACTACGACAT TTCTATAAGT TTGAGAAATA TCAGCGTTTT TGAATACCTC	900
30	TTTAACTGCT TGAATTTCTT CTTTAGTTGA TATTTCAATT GTATCTACGA CATGTTTGAG	960
	GAATCGATT C ATTTTCTCG GACGATAATA CTTACGCTTA TTTAAAAATT TAwCyTGtTT	1020
	TTCaGGATCC CaGTTtCGAA TAATATGGGC ATaTTTTCTA AATAAACGTT CTTCCGGTAA	1080
35	TTACCTTCA ATAGATGTTG GATTTACCAA CGTAAGTGAT GATGTAAATT CAGGATAACG	1140
	TACTGAAATA TCCGCACCAA TGATTCCACC CATTkCATGG cATACAAATG CAACTTCTTC	1200
	AATATATAAA TATTTAAGTA ATTCAACAAT GTCATCAGAA AAATCTTTTA TTTCAATGTG	1260
40	ACGAGGTTTA TCAGAATAGC CATGTCCACG TAAATCAATT AACACAACCTT GAAATGATTT	1320
	TGCTAATTCT GCTGCTAATT TATTAAACAC AGAATAATTA TCAAGTACAG TATGAATCAA	1380
	TACGATAGGA TAGCCTTCAC CTAAnGTACT GTAATGTATC GATGTTCCAT CTTTCTAGT	1440
45	AAATAGATCC ATAATTTTCT CC	1462

(2) INFORMATION FOR SEQ ID NO: 772:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 704 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 772:

ATTATTATAA GGAGTTATCT TACATGTTAA ATCTTGAAAA CAAAACATAT GTCATCATGG 60
 5 GAATCGCTAA TAAGCGTAGT ATTGCTTTTG GTGTCGCTAA AGTTTTAGAT CAATTmGGTG 120
 CTAAATTAGT ATTTACTTAC CGTAAAGAAC GTAGCCGTAA AGAGCTTGAA AAATTATTAG 180
 10 AACAATTAAA TCAACCAGAA GCGCACTTAT ATCAAATTGA TGTTCAAAGC GATGAAGAGG 240
 TTATTAATGG TTTTGAGCAA ATTGGTAAAG ATGTTGGCAA TATTGATGGT GTATATCATT 300
 CAATCGCATT TGCTAATATG GAAGACTTAC GCGGACGCTT TTCTGAAACT TCACGTGAAG 360
 15 GCTTCTTGTT AGCTCAAGAC ATTAGTTCTT ACTCATTAAC AATTGTGGCT CATGAAGCTA 420
 AAAAATTAAT GCCAGAAGGT GGTAGCATTG TTGCAACAAC ATATTTAGGT GGCGAATTCG 480
 CAGTTCAAAA CTATAATGTG ATGGGTGTTG CTAAAGCGAG CTTAGAAGCA AATGTTAAAT 540
 20 ATTTAGCATT AGACTTAGGT CCAGATAATA TTCGCGTTAA TGCAATTTC A GCTAGTCCAA 600
 TCCGTACATT AAGTGCAAAA GGTGTGGGTG GTTTCAATAC AATTCTTAAA AGAAATCGAA 660
 GAGCGTGCAC CTTTTAAAC CGTAATGTTG ATCCAGTAGA AGTA 704
 25

(2) INFORMATION FOR SEQ ID NO: 773:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 427 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 773:

GACCACGACA CCACAAGCTA TGAAGAATGC CyTTGTTAAG CCGCcTTTGa ATtGCATAGA 60
 GATGAAAATA CCAATATTAA TAAAGAAGTT ACAGAAAATA CCTTTTGTA AAATATTCAA 120
 40 CCATGTTGAA TCAACAGTCT TTTTCTGAAC TAAAGCTGTT AAAGCTTG TG TCATTT CAGG 180
 TGTCATGACA TGCGCAAATT TCATTAAGAA AAATAACACA AACCCACCTA AAATATTTC 240
 45 TAAGAAACAA TATAATAAAA TCCAAGTCAT CTTCTTAACA GAAACGACTT TATAATACCA 300
 GCCTACTGTA AAGTACATGA AGTTACTTGT TAATAATTCA GAGTTAGTTA ATACAATAA 360
 AATCAAACCT AAATAAACG CAATGGCTCC CATTAAATTG ATAAGTCCAT CTACGTGAGT 420
 50 ACTCGCA 427

(2) INFORMATION FOR SEQ ID NO: 774:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 774:

	AGGTGAGCAT TATTAAATAT TGCCAAGAAA TCAAACTAA AACTATGCA AAAGATGTAG	60
10	ATATATTATT TATTCTTGGC GGTGATGGCA CGGTTAACGA ACTTATAAAC GGTGTTATGA	120
	CACATGACCT TCAACTCCCT ATTGGCATT TACCAGGCGG TACTTTTAAT GATTTTACAA	180
	AAACGCTAAA TATAGCACCT GAATCATAAA CAAGCTAGTG AACAAATGGA TTTCTGCACA	240
15	AGTTGGTACA TACGATGTAA TTGAAAATGA AATGAATCAA TATGCACTCA ACTTTGTGGG	300
	CTTAGGTCTC ATGTTCAAAA CGCGGAAAAC GTACAAGAGG TTCAAAGAT GTATTGGGTA	360
20	AATGGAGTTA TATTGGGTCC ACCGTCCAAA ACnCGGcNAA	400

(2) INFORMATION FOR SEQ ID NO: 775:

(i) SEQUENCE CHARACTERISTICS:

	(A) LENGTH: 484 base pairs
25	(B) TYPE: nucleic acid
	(C) STRANDEDNESS: double
	(D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 775:

	AATTATTCCT CAATAGGAGC ATTACCCGCT CTCTCACCAA TTCCCAAAAA TGTAGTTTCT	60
	ATTTGCTTTG CACCATTAA AATTGCAGCT AATGTATTTG CAGTAGCCAA CCCTAGATCG	120
35	TTATGACAAT GAGCAGAAAA AATTATGTGA GAATATTTTT TTACAAAGTA ATTAAAAATA	180
	TCTCCGTATT CTAATGGTGT CGAACATCCT ACAGTGTCCG CAAATGTAAC TGTTCCTAAT	240
	TGATATTTTG AAATAATTTT CATGTATTCT TTCAATTTTT CTCTAGAAGT CCTTGTTCCT	300
40	TCTTCAAAAC AAATATCTAC TCCTTTTTTA TCTTTCTTTA ATATATCCAA GCAGTCTTTG	360
	ATTTTCTGAA TATAATATTT ATTTGAAAAA TTAAGCTTTT CTTTTATATG CAAGTCAGAT	420
45	ATTGGCAATA GTATTTtTAC CACTAAATTA TGAATTTtCA ATtTGACTAT TTTTgGTATG	480
	TCnT	484

(2) INFORMATION FOR SEQ ID NO: 776:

50 (i) SEQUENCE CHARACTERISTICS:

	(A) LENGTH: 788 base pairs
	(B) TYPE: nucleic acid
	(C) STRANDEDNESS: double
55	(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 776:

CGCAAGATGA AGTTAAAGAA CTTAATCGCT TATTAGGTAA AGTCATTCAT GCATTTGATG 60
 5 AAACAAAGGA AAAATAATTA ACTTTTGTCA TGACAATTAA AGTAATGTTT AGAATTTATT 120
 AAGAATAGAA AAACAATTAG CACGCGTAAC TTGTTAGTAA AAAAAGTCTG TGAAAGGTTT 180
 CTTAGCCTAT CAAGCAGTTT TTTTATGCAT TATATTGAAT CATATTCCAT AAAGCACCTT 240
 10 GATTAGCTAG TAATTGTTGA TAGTTTCCCT TTTCAACTAT TTTACCATT TATCATCACAA 300
 TGATGGTCTC AAAACGTGAC AATAAAGTTA AATCGTGTGT AGCAACAATT AATGTTTCTG 360
 CATGTGCTTC AATTAAATCC ATAACTTTAA AACTATTTTG TTTATCTAAT GCAGTTGTTG 420
 15 GTTCATCTAA AATCCATGTT GATGCAGTAT CTTTAAATAA CATCCTCGTA ATCGCTAAAC 480
 GCTGAATTTT TCCGCCAGAT AATGTATGAC CATCTAAGTC AATTTGACGT tCTAGTGCCA 540
 20 AATGTTCTAA ATCTAATTGC TTAAATATTG CTTGCACCGC TTCATCTTTT TCATCGGTAA 600
 ATAAATTTTG ACGTATTGTA CCATCAAATA ATTGTTGAGA TTGTAGCAAG ACATTTAACG 660
 ATTCAAACCT ATCTTTGTcA TCTATTTCAA ACATATCCAT ATTTTCGAAA CGAACAGAGC 720
 25 CACTATCTAA TTGATATAAC CCTGCCATAA TTTGTAGTAA TGTACTTTTT CCTGAACCAG 780
 AAGGACCC 788

(2) INFORMATION FOR SEQ ID NO: 777:

30 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 1145 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 35 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 777:

TTACAAAAGA AATGCAACAA AATTTTTGAA TCATTACATT TTTTATAAAA AATTTCACTT 60
 40 TAGATTCACA ATAATTACTT ATTTTGTCAA TTTATTTAAT GTCAATATGT TGATTAATTA 120
 ATAGTGTGTT CTAATGTATA TAATATTTAG GTCATCGTTA TAGTCAACAA TAATAAGGTA 180
 45 TTTGAGTTG AAATTTATCT TATTATTTTT CCACTTTTAC GTGCTATCCC ATTACACAAA 240
 AACAAATAAG TAAAGATATT AAGTACAAAA AAGTGAACA CCTTGTAGAT GCTCCACCTC 300
 AATTATATTA AGTTATATTA TTTTGCTGCT TGGTATAATT CATCAACTTT TTTCCAGTTA 360
 50 ACAATGTTCC AAAATGCAGT CATATAGTCT GGACGTTTAT TTTGATATTT CAGATAGTAG 420
 GCATGCTCCC AAACATCAA TAGTAAGATT GGTGTTTTGC CTTCTGTTAA TGGATTATCT 480

GATCCAAATA ATGTTGTTGC TTTATTTGCA AATTCATTTT TAAATTCATC TAAAGTGCCC 600
 CACTGCGcTT TGATGTCATC TATTACGCCA CCTTTTTCTT CAGAATTAGG TGATAGTATT 660
 5 TCCCAGAATA ATGAATGGTT AAAATGACCA CCGCCATTAT TACGGACTGA CATCCTCATC 720
 GCTTCCGGTA CCTTGTCTAA GTnAGCAATC ATATCCGCTA GTGATTGATG CTCTAACTCT 780
 GTTCCTTCAA CTGTTGCGTT TAATTTGTC ACGTACGTAT TGTGATGTTT GTCGTGATGA 840
 10 AACTCCATTG TTCTTTGATC TATATATGGT TCCAATGCAT CATATGCATA TGGTAAATTT 900
 GGTAATTTAA ATGCCATAAG TATATTCCTC CTTTTATGAA TATACTTTTA TAATAATTAA 960
 TTTTGGGTGT GTTTTGCAAT AATTATTATT TATTGTATT ATCCAATTAT ATAAAATTTA 1020
 15 AATATTCGAA ATTGATATAA TATTTAATAT TGAATGCAA AAGGCATTTA ACTGCTTTTG 1080
 TTTCCCGCTT TTAAAGAGAA TTAAAAAGA CAACTTCCAT TTTCAATAA GAAATTGCCT 1140
 20 TTTCT 1145

(2) INFORMATION FOR SEQ ID NO: 778:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 902 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 778:

AAAAGAGGnc CAATATTATC AATATACGGC CGGAAGATTC CCTTTTTCTT CTCCACTTAC 60
 TAAGCCCATC AATGGTGTAT GTTATCaATT GGTGCTATCC GCATTAAATA ATTATCTTCA 120
 35 ATTGTGGTAT CAAAGCTATT CGCTTTTTCT CCAATAATGT CTTTACCATA TTTATTGAAT 180
 GCACCTACTA AAATCAACAT AAATGGAATT AACAAGGTTA CTACAATTGC CATTCTTATA 240
 AATTGTGGTA TATAAGAAGG TCGCCAATTT AAAGCTTTAA TACCTTCTTw TCTAAATGGA 300
 40 GTTCTATAA AGCGATATGA TAGCTCTGCA AATATAATTG TTAAACTTAT ATCTATAAAG 360
 TACACATATA CAGGTATCTG TCCGTCTACA TAGTAACTAT GTACGAAACT AATTACTGCA 420
 AAATGCCATA AATATAAACT ATAAGACCTT TTCCCGATAA ATACTAACAC TGGATTTGAA 480
 AATATCTTCG CtATCCATGT AGATGGATGA ACGACACTAG CAATAATAAA TAACGTTAAT 540
 ATGGATATTA AATAGAAACC ACCATCATAT ATCCAATTCG TCTCATCATT AATAATGAAA 600
 50 AATAATAATA TAAGTACTAT AAATGATAAA CTACCTATGC TATCAATAAC ATATTTTACA 660
 ACTTTAGGTG GATCATTTTT CAATTTAAAC GGTGGCCATA AAAAAGCTAA AATAACACCC 720

ATACTATAGA TAAACATCAT TAACCCTAAA GAAATTATTG ATACTCCCCA AAAAATAAAT 840
 CCTATTTTGT ATCGCTTTTT AATTGTTAAC AATAATGTAA CCAAAATAAC TGGGAAAAAT 900
 5 AT 902

(2) INFORMATION FOR SEQ ID NO: 779:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 779:

GGAATTAGTT TCCTAATGAT CAAACCATAA CCATTAGCTT TTAATGATGT TACGCCTTTA 60
 AAGATTAGAG GATGATGACT AATAATAGTA TTATAACCTT TTCGATTGC TTCATTTACT 120
 ACTTCCAACG TACAGTCTAA TGCTGTTAAA ACACCAGTAA CTTCAACATC TTCATCACCT 180
 ATTAACAATC CTACATTATC CCAAGATTCA GCAGTACTAA ATGGCACATG ATGATCTAAC 240
 AATGTCATTA AATCAGCTAT TTTCATaCTA TAACACCCTT TCAATTACaG CAATTTCTGTC 300
 aTTAATTTGa GCTAAAcGTT GakGakGTTG TTCAGTawTG AGtTTCGaTT TAAtATGATA 360
 AAgTGCyTct AACTCtCTTT GcCATTTtTT TATAAAATAT 400

(2) INFORMATION FOR SEQ ID NO: 780:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 557 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 780:

GTCCTGTTT TAACATCAAT ATCTATCTTT TTAATATCTT GAACATAAAG CAGATTCAGT 60
 TGGCTAATAT TTGAATTTAT GTTAATCACT TTTTTCGTTT CATTTTTAAA ATGTACTGTG 120
 TAAGTnGCTT TTTTTCGATA TTTTAATTCA CGTTCCCCGA TACCTCTATC ATGCTTCAAT 180
 ACTGaTTTAA CTTTTTTAGA GATATCTTTG TAGCCTACAC GTGGGTCACC TGTAAATTTT 240
 AAATCTGaTA AAATTGGTGT TGATGTGCCA TTTACTGCAA TTGTGTATGG TACATATCTG 300
 TCTGCTTTTCG CTTTAGTTCC TGTTTTAACA GTAATTTCAA TTCTCTTAAC ATCTTTTCGCA 360
 TGAAC TAAGT TTGCTGTGTA ATTTTTTGAA TTCAACTGTA AGATTCTTTT ACCACCATTT 420

CTATCATGCT TCAGTACTGA TTTTATTTGA CTAGTTAAAT TTTTGTAATT TGTCCAAGGT 540
 TTATnTGAAA ATGAAAG 557

(2) INFORMATION FOR SEQ ID NO: 781:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 475 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 781:

TTCTGATAAC ACAACTTTCT TGGACCAAGT GACAATGGTA AAGTTGATAT TCTCAAAAAA 60
 TATATTTTAT TGAAAAGGTA ACTATATCGA CCGCTCTGTG CGACTTGCTG TGTAGAAACA 120
 TCAAGCCCAG CTTGAACTT CATATAAACT AATAACTTTT GATAAATGCT ATTCCCAATT 180
 TGTTCACTACT GCTCCAAGTT ATCATTAATT CTAAATTTAA TACTTACTTC ATTTTAACT 240
 GGAATAAAAT GTACATCACT CGCTTTCATT TCTATCGCTT TATTAATTAT TTCTTGAAAT 300
 AGAATCTTCA AAAAAACACC TCCTACATAT AATCACGTAG GAGGTGTTTT TATTACTTCA 360
 ATTTAACCGT GTAAAAATGG ATTTAATTGT TCATCATCAA CCGTCGTATA TGGACCATGT 420
 CCAGGGAATA AAGGTAAATC GCCTTCTAAT TCAAATATTT TATCTTGAAT AGAAT 475

(2) INFORMATION FOR SEQ ID NO: 782:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 782:

ATGAATATCG GTGCAGGACG TATCGTTTAT CAAAGTTTAA CTCGAATCAA TAAATCAATT 60
 GAAGACGGTG ATTTCTTTGA AAATGATGTT TTAAATAATG CAATTGCACA CGTGAATTCA 120
 CATGATTCAG CGTTACACAT CTTTGGTTTA TTGTCTGACG GTGGTGTACA CAGTCATTAC 180
 AAACATTTAT TTGCTTTGTT AGAACTTGCT AAAAAACAAG GnGTTGAAAA AGTTTACGTA 240
 CACGCATTTT TAGATGGCCG TGACGTAGAT CAAAAATCCG CTTTGAAATA CATCGAAGAG 300
 ACTGAAGCTA AATCCATGAA TnAGGGCAtn GGCCATTTGC ACCGGGGCCT GGCCGTAATA 360
 AGCCAAAnGGA CCGGGCCAAC CGTTGGGACC GGAAGAAAA 400

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 810 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 783:

GATTAATGTA CTCGTGTACA TAACGTTTGA AGTATGATAA ATAGATATAG AAATAAAGTC 60
 ATATGTGACA TCAATTAAAT GATGTTCAAA TGACAAGATA CAATAGAGGA ATGTTTGTAA 120
 TAA₁AAACGCT TCATATAAAG GTCGAGTCAA TATATGATAC GACTTTATAT GAAGCGTTTT 180
 ATTTGCTATG AGCTAGTATA TTTTATAATA ATTTTCTAT TTCTCTTTCG ATTTGAACAG 240
 GTTTTTTTTG AGGTGCAAAT CGTTTAA₁CAA CGTTACCTC GCGATCCACT AAAA₁CTTAG 300
 TGAAATTCCA TTTGATTTTC TCATTAAAGA ATCCGTGTTG TGCCGCAGTC AAATATCTAA 360
 ATAAAGGTAA TTGATGTTCC CCTTTTACGT CTATTTTTTG ATGCATAGGG AAGGTAACAC 420
 CATAGTTTAA TTTACAGTTT TGAGCTGCTT CTTCGCCTGA ACCAGGTTCT TGGCCACCAA 480
 ATTGATTACA AGGGAAACCT AGAATTACAA ACCCTTGATC TTTGTATTTT TCGTATAATG 540
 ATTGCAAACC TTCAAATTGT GAAGTAAAGC CACATTCGCT AGCTGTATTA ACAATTAGCA 600
 TAACGTCACC CTTATATGCA TCTAATTTGT AAGTAACACC TTTATTTGTT TCTACTACAA 660
 AATCATAAAT TGTCTCCATT GTATCATCCT TTCGATTTAC TTAA₁aATGTA CCAC₁AAAATC 720
 GTGTAA₁AGT CTkTACTA₁A ACTCTATGAT AGAATACTTT GAGTAGGATT TTATTAAGGA 780
 GATGTATAAC ATGGnTCAGC AACAAATTCA 810

(2) INFORMATION FOR SEQ ID NO: 784:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 788 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 784:

AAATTCATTG CAGAAAACAT AGATAAATAA ACAAATTGAC TTAAACGAG CGTTGCAACA 60
 TATCTCGAAT TGTAAGGAG CTTGAAAATG AATAAAAATA TAGTCATTAA AAGCATGGCA 120
 GCATTAGCCA TTCTAACCTC AGTAACTGGA ATAAATGCTG CAGTCGTTGA AGAGACACAA 180
 CAAATAGCAA ATGCAGAGAA GAATGTTACG CAAGTTAAAG ATACAAATAT TTTTCCATAT 240

	ACCAATAAAC ATGTATCAAA AGATTATAAA GTTGGCGATA GAATTACTGC CCATCCAAAC	360
	GGTGACAAAG GAAATGGTGG TATATATAAA ATTAAAAGCA TTTCTGATTA TCCGGGTGAT	420
5	GAAGACATCT CTGTCATGAA TATTGAAGAA CAAGCAGTCG AACGTGGACC AAAAGGCTTT	480
	AATTTTAATG AAAATGTCCA AGCATTCAAT TTTGCGAAAG ATGCTAAAGT TGATGACAAA	540
10	ATTAAAGTTA TTGGTTACCC ATTACCTGCT CAAAATAGTT TTAAACAGTT TGAATCTACA	600
	GGAACTATAA AAAGAATsAA AGACAATATT TTAAATTTTG GATGCCATAC ATTGGAACCC	660
	GGGGAATTCA GGGATCACCA GTTCTAAATT CTAACAATGA GGTTCATAGG GTGGTGGTAT	720
15	GGGCGGGTAT TGGGAAAAAT TGGGTTCTGG AATAATAATG GGTGGCCGTA TACTTTACGC	780
	CTCCAnAT	788

(2) INFORMATION FOR SEQ ID NO: 785:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1023 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 785:

30	CAATATTTTA GAAACAaTAA TTAAGTTGCG ATGAACAAAC TATTAACAAT AATCTTGAGT	60
	ATTATATTTA TCTTAATTAA TAATATATTT ATTAAAGATT ATGTTACTTC CAACTTTCAA	120
	AGTAGAAAAA CGGTATAATT TGTGATGGG TGTTTATTGA TAACTGCAA AAAATACAGC	180
35	CTACAACCAC ATAGATTGTA GACTATATTT AAAATAATAG GTATTTATCA TATCTCGTAA	240
	ACTTAGTGCC AATTTTTATA CTCGTGGTGC TGGTAAGCTA CCCTTAAATT CAGGAACGTA	300
	GTGTGTaGGG CTATAACTTG GAACAGCATA TTGATAATTT ACATTTTTGA TATTTAATGA	360
40	TGGTTTCCCA ATTTTATAAC CATTTGATTG TGAAAATGAG AAATAkTTCT TCACACCTTT	420
	AACTACTTTA TAAGAATAGA AGTATTTATA GTCATATGCT TTATTTACTT TAGCATTTTG	480
45	ATGTGTTGCT GTTGTGTTAT TTTGGAACT TGGTACATGC ATACGATGTG AATTGTGACC	540
	ATATGGTGGA ATTACCTTGA AACTATTTAT TTGTGGCACA ACACAAAAGT GATTAATTTT	600
	AATGCTAGCA TGCCCTGGTG TAACAAATTT ATGCGCGTGA TATCCAGGAA CTGCAAAATG	660
50	ATGCTTGATA ATTAAAGATT gAGATGGATG TGTATATCTA GGCGATTCTG ATGGTTTAAC	720
	AATAAAGTGT TTATTAATAG AATCCTTTGC ATGATTTACA TGTTTATGTA CATGTGTTGA	780
55	TTTGTATGAA GTAATAACTT TCTTGTAGTG GGTTCGCGTA GTAATGAAGT GGTGGTTTAC	840

TTGTTGTGAA GCTGGATTGT TTGTTGCTAC ATTCACGCGA TTATTGATTT CTTTGTACTC 960
 TGGCACAATG TTTCCTAACT TTGATTCTGG nACGACAAAG TTTTATCTA CAATTTTACT 1020
 5 AGC 1023

(2) INFORMATION FOR SEQ ID NO: 786:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 487 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 786:

TCAAGTTTAT TCGCTTGTTG GAAAGCTTTA ACTTGATTTT CTAAAGCTTT ATCAAATTGC 60
 20 GTTGATTCAT TATCAACTTT ATAACCTAAA GCTGATAAAC CAATTTTAAT AGTTTAAATA 120
 TTTTATCAT CGTCTCCAAC TTAAATGTT TTCGTATTAG GAATGACATT TAAAGATTGA 180
 TATTTAGGTG TGTCAATAGT AACGTCTGGT TTAATGCCTT TACCGTGAAT ATAATGACCA 240
 25 TCTGGCGTTA ACCATTTTCAT TTCAGTATAT TTAAACAATG AACCATCCTT AAACCTCTCTT 300
 GTAGTTTGTA CGACACCTTT GCCGAATGTT TTTGACCCAT AAACCTTAGC TTTATTATAG 360
 TCTTTTAGCG CACCAGTAAA CACTTCAGAA GCGCTAGcTG AACCTTCATT CACTAAGATG 420
 30 GATATATCCA TGTCTTTCGC TTCTTTTAAC GCATCATTAG AAGTtGAATT GCTCAGTACT 480
 TTACCTT 487

(2) INFORMATION FOR SEQ ID NO: 787:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 803 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 787:

GnAAACnATA TTTAnAATTA AGTGTTTCGAT TTGCAGTAAA TTCATACAGA AAAGCTAAAA 60
 TTAAAATGAT ACaGTGGAAT AATGTCACAT TCTCCATAAA TAATTGACCG AAGAAGCATA 120
 50 AAACATAGAA TAGTACAGTA ACACTTACCG GCTGCTTTTC TTTATATATA ATTGCATTAA 180
 TACAATAATA AATAATAAAG AGTGAAATTA GTGTTGATGT CGCATAATTA TAAAATCCTG 240
 CAAACCAGCC ATATGTATCT GCATAAATAG CACTTGGTAA AATTAACATT AAAGAAAATG 300

TGCCCATACT AATGAGGCCA TATGAAAGCC AACGTAACCA GCTTACATGT ACAGCTATAA 420
 TTTCAAAGAT ATTTCCGATA TAGCGACCAT TAAGTGATGC AAATCCTACT TTTAAAATAT 480
 5 CAGTATTATA ATTGCTAAAC CATTGTAAAT CATCGTGCAT GAGTGGTAGT AAGATACCCA 540
 TAAAAGTATA AAACAATAAT ATCGCAATTA ATATCAAAGT TGTCTTGTGT AATTGAATTG 600
 TTTTCACTTT GCTAATCCTC AAATCTAGTT AAATTTTCCT CAACTTGTAG GTCGAAAAAT 660
 10 TAATTCAATA TTTTAAATGT ATTTCTAATT TTCACCTATG CATGTTTCCT CAATCAAATT 720
 AGATAAACAA GGTATTTAAT ATTACTTTCA ACAATTTATC TAAATCGCCC CTCGTCTTTT 780
 15 TCTATGaCGA ATGATTACAC TTG 803

(2) INFORMATION FOR SEQ ID NO: 788:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 788:

GAAAAGTTGT ATTATGAATA AAGTTAATCA AGGTGCTCAG GAAGAGGCAA TGGAAGAGTT 60
 ATTAGTGA CT TTTCAAAAAT TGATTAAAGA CTAAAGGAGT TTAAGATGAT ACATCAAAAT 120
 ACGATTTACA CAGCGGGAAT TGAAACAGAA GAACAAGTAA GTCAATTGAC AGAACGCATT 180
 TCAAATATGA TAGGTGTTCA TCAAGTGAAT ATTAATATAA TAGATGGTCA AGTAACTGTA 240
 35 TCGTATGAGA CACCAGCAAA TTTGAATAGT ATTGAAAAAG AAATCTATGA TGAAGGATAC 300
 AAAATTGTAT TTTAGGGTAT AATGTAGAGT GCGCTATAGA TTTTAATTTT GAAAATAAAT 360
 TAAAAATTTT GTAAATGATG TAGTAAAGGT ATGTCGAATA 400

(2) INFORMATION FOR SEQ ID NO: 789:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 762 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 789:

GTTTAAAGAT GGAGAGATTA TTGATTTTTT AGCTGGAAAA GGTGAAGCGG TATTGAAAGA 60
 TTTAATCAAT ACTGATGAAG GTTCAAGAAG ATTAGGTGAA GTAGCATTAG TACCTGATGA 120

ATGTCATTTA GCGATTGGAT CTGCTTACGC CTTTAATATT CAAGGTGGAA CGGAAATGAC 240
 TGTGAGGAA AAGATTGCAA GCGGATTAAA TGATTCAAAT GTACATGTCG ATTTTCATGAT 300
 5 TGGTAGTAGT GATTTGACTA TTTATGGCAT ATTCGAAGAT GGTTCAAAAG AACTAGTATT 360
 TGAAAATGGA AATTGGGCAT CAACATTTTA ATAAATGTTA TTTTGAGGTG CTGAGTAGGA 420
 AATGAAACAT GTATTTAAAG GTCAAATACG TGATTAAAGT ATAGATTGGG AGATAAAATA 480
 10 ATGACAAATC AGGACAGACC AATGAAATCT ATGTCAGAAT CAAAATGTTA TAAAAATAGA 540
 CAAGTTTTCC CTCAAGATAC GAATCACCAT CATACAATGT TTGGTGGTAC ATTGATGGCT 600
 15 AATATTGATG AAATTGCAGC AATCACAGCT ATGAAACATG CTGGTGCGCA AGTAGTTACC 660
 GCATCTACAG ACTCAGTAGA TTTCTTAAAG CCGATTAAAA CAGGGGACAT ATTACAATAC 720
 GTAGCGATGG TTTCATACGC TGGGACTAGT TCAATGGAAG TG 762

(2) INFORMATION FOR SEQ ID NO: 790:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 400 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 790:

TTTAATTTTA TCTTTTGGAT ATCACATAGA TGCTACTTTT CTATACTGTT CTAAATCTAT 60
 TATTCGTCA CATTGATTTG CAATAGCCAT ATCATGTGTT GCTAAAATCA GCACTTTATT 120
 35 TTCATCGACC AAACCAAATA ATGATTGAAT AATCATCTGT CCTGTTTTAG GATCTAACGC 180
 ACCCGTTGGT TCATCAGCTA ACATAACAAT CGGATCTTTT AACATCATTG TAATTAAAGC 240
 GACACGTTGT TGTTACCTC CACTTAGCGT ATGAACTTTT CTTTTTAAAC TGTTTGACAG 300
 40 ACCAACTGT TCTATATAAC GtATCTttAT TTGTnCTTTT TCTTTCTTAC TTATTTTTTT 360
 ATATGCTAAT CCAATATCTA AATTTTCATT TACTGnCAAA 400

(2) INFORMATION FOR SEQ ID NO: 791:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 400 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 791:

AACGTAAAGC GGAAGTTGGG ATGGTTGAAG ATGCTGAATT TCATGCGCAA CTACATCGTT 120
 ATAATGCTTT TCTAGAGCAA CATCAAGATG ATAAAGTGTT GTATTThGAA ATTGGAATTG 180
 5 GTTATACTAC ACCACAATTT GTGAAGCATC CTTTTTCAGCG TTGACACGTA AAAATGAAAA 240
 TGCCCTTTTAT ATGACGATGA ATAAAAAGGC TTCGCATTCC GAATTCAATT CAGGACGTAC 300
 CATACTTTAA CTGAGATTCT CAACTTGTTT AGCAGACTCC GGACGCAGCA CACGAAATAC 360
 10 ACATGGGGGC AGAGThACTT ATGGACCGTT GAATGnGATA 400

(2) INFORMATION FOR SEQ ID NO: 792:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 678 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 792:

GTTCCGTTTG ATACAGAGAA GCGAATGTAA GCATAATCTT TAACAGTATC GTATGATAtA 60
 25 AtTTAATTGG CAACTTTTTG TCACCTTCAT AAACCTTCAAA TTTTCTCCAA AATTGACCTG 120
 ATTGTAATCC TAATTCAATT TCTGGTTTTG AATCAGTGAA AATAACTCTA GCAGGTTTAA 180
 30 CAGAACTTGC ATAATGATAA AACTGTTGAG TTCCATCTTT CTTTTTCATT TCAAAATCAA 240
 TTGGACGAGA GTTTGGTGCG CTATGATCTT TGTCTTTTAT TGCAGGGTTT TTAATCGCTT 300
 CTCTAAGTTC CTGaTTCAAA ATAGGATATG TATTGTTAgT GGCyTTTGCT GCTGGTTTTAA 360
 35 CTTCTTTTGT TTCCTTAGGG GcTTTAACTT CTTTAACTTC TTTAGCTTCT TTTGTTTCAG 420
 AAGTAGGGGC CTCAACTTCT TTATTAGATA CTGAGACAGC ATTAGCTACT GGTTTAGTTT 480
 CTGGAGCTTT TTCAGATGTT GTTGTGGGAC TTGCAACTGC TTCAGTTTTT GGTTGTGCTT 540
 40 CTGTATTTGT ACCACCTGTT TCTTCAGCTG CTGCTTGTGT TCGCCATTTG ACATTAATAA 600
 TAAAAGTGTA CTAATTGCTA CAGATGCAAC GCCTAGTGAT GACTTTCTAA TTGAATAAAA 660
 TGATTTAAAT TCTTTTTG 678

(2) INFORMATION FOR SEQ ID NO: 793:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 351 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

ACTGGCGGAT CCACGATGGC ATGTGTTAGT GAAGCAATTC ATTTATTACC ATATAATGTA 60
 TTCTTCGTAC CAGCCAGAGG TGGACTAGGC GAAAnTGTTG TCTTTCAGGC AAACACAATT 120
 5 GCAGCCAGTA TGGCACAACA AGCTGGCGGT TATTATACGA CGATGTATGT ACCTGGATAA 180
 TGTCACTGAA ACAACATATA ATACATTGTT GTTAnGAGCC ATCAGTCATT AAACACTTTA 240
 GGACAAAATT AAACCAAGCA AACGTTAATA TTACACGGGC CTTTGGTGAT GCGCTGGAAG 300
 10 ATnGGCGCCT CGGACGTCCA ATCACCTGGA AAAGGTCCTT GGAACCACTT C 351

(2) INFORMATION FOR SEQ ID NO: 794:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 794:

GGGCGAGGCG TTCGCGCACC GGCCGAGCAG CAAATAGGCC GGGATGTCGC GTCTTGCTGC 60
 25 AGGTCCGAAA AATATCAACT TGAAGAGGTA ACACCGnTAG ATATGTTTCC ACAAACAACA 120
 CATGTTGAGA CAGTGGCATT ATTCAATTTG AAATAGCGCA CATGATTGA GATAAAATTT 180
 30 CGCCTTAATA AGTGAAGAAA GAAGTCGTAT ATTAAAATTT TATTACAGCC AATTTACTTT 240
 CTTGATATGA ACTTTTTTAAA TTAAATGTGA CATTGTATAC TATATTTAAA GAAGAATAAG 300
 AATGTCATGA TCGGGAGGGT TGGTAATGCA TAAATTTGAT TTAACGACAA ATAATTTTCA 360
 35 AATGCGAGGT TTATTATCCT GGCAACCTGG TTATTGCGTT 400

(2) INFORMATION FOR SEQ ID NO: 795:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 407 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 795:

ATGTTCCAGG AACGTATTTT TACAACCGAC AATTAGCATA TGCATAATG AGTTTTATAA 60
 50 TTGTATTTT TATTGCATTT TTAATGAATG TTAAATTACT GAGTAATATT AAAGTGCAAA 120
 AAGGTATGAT TATAACTATC GTCTCACTAT TATTACTGAC GTTAGTAATA GGTAAAGATA 180
 TTAATGGTTC TAAAAGTTGG ATAACTTAG GATTTATGAA CTTACAGGCA TCTGAGTTAT 240

TAAGTAAACC AAAATTAATc TTAAGTCCTA TTGTATTAGC ATTAGGTTGT ACGTTTTTAG 360
 TTTTCCTACA AAAAGACGTG GGCAACATTA CTAATATTAA TnATnTT 407

(2) INFORMATION FOR SEQ ID NO: 796:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1053 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 796:

CAGTAGGTAC ACTTGCAGCA TTGTGTGGAT ACTTAGAGTT ATTGTTCCGGG CCTTTACGTC 60
 GTTTAGTCGC ATCATTTACA ACTTTAACGC AAAGTTTTGC TTCAATGGAC CGTGTATTCC 120
 AATTAATTGA TGAAGATTAT GACATCAAAA ATGGTGTGG TGCTCAACCT ATTGAAATTA 180
 AACAAAGTCG TATTGATATT GATCATGTTA GTTTTCAATA TAACGATAAC GAAGCTCCAA 240
 TTTTAAAAGA TATTAATTTG AGTATTGAAA AAGGAGAAAC AGTTGCTTTC GTAGGTATGA 300
 GTGGTGGTGG TAAATCAACA TTAATTAACT TAATACCGAG ATTTTACGAT GTAACCTCTG 360
 GGCAAATTTT AATAGaTGGT CACAACmTTA AAGaTTTTTT AACGGGAAGT TTAAGAAATC 420
 AAATAGGATT GGTGCAaCAG GATAATATTT TATTCTCTGA TACAGTTAAG GAAAATATTT 480
 TaCTTGGTCg TCCaACAGCa ACAGATGAAG AAGTAGTTGA AGCGGCgAAA ATGGCTAATG 540
 CACATGACTT TATTATGAAC TTGCCACAGG GATATGACAC TGAAGTAGGT GAACGAGGTG 600
 TTAAATTATC AGGTGGTCAA AAACAAAGAT TATCGATTGC TAGAATATTT TTAAATAATC 660
 CGCCAATTCT TATCTTGGAT GAAGCAACAA GTGCACTTGA TTTAGAAAGT GAATCCATTA 720
 TTCAAGAAGC ATTAGATGTG TTGAGTAAAG ATCGAACGAC ACTTATCGTA GCGCATCGCT 780
 TGTCCACTAT TACACATGCT GACAAAATTG TCGTAATTGA AAATGGACAT ATTGTTGAAA 840
 CAGGTACGCA TCGTGAATTG ATTGCAAAAC AAGGTGCTTA CGAGCATTTA TATAGCATTC 900
 AAAACTTATA AAGTATTAGT TGTTTGACTT CAGTACAATC TTGAAGAGAA AATTTGTAAC 960
 AGGATGGTGG GGTCAATAACA TAGAAAAAGC AGTAAGAGAT TTTCTTAGTT GAAAATAATC 1020
 TThCTGCTTT TTTAAATTTA ATTTcGnGAT TCA 1053

(2) INFORMATION FOR SEQ ID NO: 797:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 544 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 797:

5 AAGAGTGACT CCTGAAGTGA AAGAAGGGGA CCGTGTCTGTG TTCCAACAAT ATGCTGGTAC 60
 AGAAGTTAAA CGAGATAATG AAACATATCT GGTATTAAAT GAAGAAGATA TTTTAGCAGT 120
 TATTGAATAA TACAGAACTT AATTCATAAA TAAATTAAAT AGAACGAAAA TGAAACACAA 180
 10 CTAAACAAAT GGAGGTTTAT CATTTATGGT TAAACAATTG AAATTCTCTG AAGATGCACG 240
 TCAAGCAATG TTACGTGGTG TTGACCAACT TGCAAATGCA GTTAAAGTAA CGATTGGTCC 300
 TAAAGGACGT AATGTTGTAT TAGATAAAGA GTTTACAGCA CCTTTAATTA CGAATGATGG 360
 15 TGTGACGATT GCyAAAGAAA TCGAATTAGA AGATCCATAT GAAAATATGG GGGCTAAACT 420
 AGTTCAAGAA GTCGCAaATA AGACAAATGA AATTGCTGGT GACGGTACGA CAACTGCAAC 480
 AGTATTAGCT CAAGCAATGA TTCAAGAAGG CTTGAAAAAT GTTACAAGTG GTGCGAACCC 540
 20 AGTT 544

(2) INFORMATION FOR SEQ ID NO: 798:

(i) SEQUENCE CHARACTERISTICS:

- 25 (A) LENGTH: 372 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 798:

CAATTGCATA GATATTGCTG ATAGACGTAC GGCTTTGTTT ATCAACTTCT AATAATCCAC 60
 35 GGTCAGCGAA TTTAACACCT AATTTCTGTCT GTGTTTGGAC GACGACCTAC AGTTACTAAT 120
 ACATAATCAG CTTGATTGT TTTCTCTTCG CCTTTAGCTT CATAAGTAAC TTTAACTCCG 180
 TTATCTGTTT CTTGAGCTGA TTTAGCCATA GCTTCAGTAA CGATTTCAAC ACCTTTTTCT 240
 40 TTCATACCTT TTTTAACAGG TTGTGTGCAT TTGnTTTTTC GAGGCCACCT AAGATATCTT 300
 TAGCACCTTC AAGGGATGGG GTACTTTCTG nAACCAAAGT TAGCAAATGC TGTACCTAAT 360
 45 nCTGGTCCAA TG 372

(2) INFORMATION FOR SEQ ID NO: 799:

(i) SEQUENCE CHARACTERISTICS:

- 50 (A) LENGTH: 1182 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 799:

5 AAACGACATT TGTTTAATTG GAAGAATTaG CACCATTTTT TGAGGCGGGT ATAGaTCAT 60
 TTTAAATCGA TGGTATTCTA CAAACGGAAG AATATATTAA TGTGGTAACG GAACAGTATC 120
 GTCAAGCGAT AGATTTGTAC AATGAAGATC CTGAAATCTA TGAAGATGAG AAATTTATGT 180
 10 TGATGGATCC AATTGAAGAA ATTCAACCTg ATCATCGACC ATTTGACGAA GGTTCCTTAT 240
 ATAAACAAAC AGTATATTAA GGAGGTTAAT CATGAAGACA ATAGAAGAGA TTAAATCAAC 300
 TCCTAAAACA GTTATGAAGA AACCAGAATT ATTAGCACCT GCTGGAAACT TAGAAAAGTT 360
 15 AAAAAATAGCA GTACATTATG GCGCTGATGC CGTATTTTTA GGTGGTCAAG AATATGGATT 420
 ACgTTCaAAT GCTGaTaATT TCaCGATGGA AGAAATAGCT GAAGGTGTTG AATTTGCGAA 480
 CCGTTACGGT GCCAAAATTT ATGTTACGAC AAATATTATT GCACATGATG AGAATATTGA 540
 20 AGGTCTAGAA TCATATTTGC GTAATTTGGA AAAGACTGGT GCGACAGGTA TCATTGTTGC 600
 AGATCCTTTA ATTATCGAAA CATGTAAAGA AGTTGCGCCA AAAGTTGAAA TTCATTTATC 660
 TACTCAACAA TCACTTTCTA ATTACAAAGC TGTAAGATAT TGGAAAGAAG AAGGATTGGA 720
 25 TCGTGTTGTA TTAGCACGTG AGACCGGCGC GATGGAAATG CGTGAAATGA AGGAAAAAGT 780
 AGATATTGAA ATCGAAGCAT TTATTCATGG TGCTATGTGT ATCGCCTATT CAGGTAGATG 840
 30 TACATTAAGT AATCATATGA CTGCAAGGGA TTCCAACAGA GGCGGTTGCT GTCAAAGTTG 900
 CCGTTGGGAT TATGAATTAT TAGAAGTTGA TGATAATGGT GAACTTGATG TTTTTTATAA 960
 TCAAgGTGAA GTTACACCGT TTGCGATGAG TCCTAAAGAT TTAAAATTAA TCGAATCAAT 1020
 35 TCCTCAAATG ATGGATATTG GTGTGGACTC ATTAAAAATT GAAGGACGTA TGAAGTCAAT 1080
 TCATTATATT GCAACAGTTG TCTCAGTATA TCGTAAAGTC ATTGATGCGT ATGCGGCAGA 1140
 TCCTGACACT TTAAGATTAA TCCGGAATGG TTAATAGAGT TA 1182

(2) INFORMATION FOR SEQ ID NO: 800:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 989 base pairs
 (B) TYPE: nucleic acid
 45 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 800:

50 GTATTCTTCC AATAACACCT TTCATTTGGA AACCGTTTAG AAAGAATACA GTTACTTCAG 60
 TTTGGTTTGC TTTAAAATTC TCTaGTGCTT TGTCTTGGAT GTTTTCGtTG cAATCATCTG 120

	TTTTCTTTAT CTAACCAATG AACACTCATT TTATTCTTGA ACCATGTCAT TTGTCGTTTT	240
	GCATATTGGC GTGAATGTTG CTTTAAATCA TTGACAGCAT CTTCATAAAT CATTGTCCG	300
5	TTAATCACAG GTATTAATTC TTTATATCCA ATAGCTTGCA TACTTTGGCA AGATTCATAG	360
	CCTTGTTCAA CAAGTTGTTG CACTTCTCTA AATAATCCGT GATCCAACAT AATATCAACA	420
	CGTTTATTTA TTCTTGAATA TAATGTTTTA CGCGACATTT CAATCCCTAA TAATAATGTA	480
10	TCATAATTTT CAGTAAATTG TTGCACTTTC TTGCGATTAC TCAAAAAGTTT TTTTGTTTTT	540
	AAATAATATT CAATAGCGCG CAACACTCTT TGGcGGTTGT TAGGGTGAAT ATTTTCTGaC	600
15	AGAAACCGaC ATCAAATTGA GCTAAATAAT CGTGTAGTTG CTGATTATCT AAATGTTCTA	660
	ATGCAGATAA CTTTTGTTTA ACTATGGATA ATTGTGCAGG TGTAcTGTTT CATCTTCTAA	720
	TTCATAATTA TATATTAATG ATTGAATATA TAAGCCTGTT CCACCTGCTA TGATTGGaAC	780
20	TTTACCTCTA TTCGTTtATAT CAGTAATTAA ATCTTCTGCT AATCGCTTGA ATTCATATGC	840
	TGAAAATGTA TCATCAGGAT TCAAGATATC AATTAAATGA TGTGGAATAC CATCCATTTC	900
	TTCAGGTGTn ACTTTTGCAG TTCCAATATT CATATGTCTG TAGACTTGCA TAGAGTCACC	960
25	GCTTATGATT TCACCATTGA TACGCTTCG	989

(2) INFORMATION FOR SEQ ID NO: 801:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 543 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 801:

	CGTTAGATAT AGAATTAAAA GATAATATTA AATTTCAAAA CGGTCAAAAA TTGACTGCAG	60
40	AAAAAGTGAA ATCTAGCCTT GAAAATAGCA TGAAAAAAG CGACTTGGTC AAATATTCAT	120
	TACCAATATC ATCAATTACC GCTAAAGGTC AAAAAGTAC AATTAAAACC AACTCCGCTT	180
	ACCCTGaACT TGTATCTGAA TTAGCTAATC CTTTTATGGC AATTTATGAT ACAGATGCTA	240
45	AATCAGATGT TAATCAAACCT CCTGTTGGTA CAGGCCCTTA CCAAATAAAA GATTATAAGC	300
	AATCTCGAAA AATATCATTG TCGAATTTTA AGGACTATTG GCAAGGTAAA CCGAAACTTG	360
50	ATCATATTAC TGTGACGTAC CAAGAAGACG GCAATAATCG CGTCAGAAAT TTAGAATCTC	420
	AAAAAGATGA TTTAATAACT GATGTCCCAG TTAATAAAGT TCAAGACATA GAAAATAATC	480
	AAAATTTAAA AGTGTCAAAA GAATCTGGAT TTAGAACTTC TTTACTTATG TATAATCATA	540

(2) INFORMATION FOR SEQ ID NO: 802:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1139 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 802:

	GCGAATTCGT ACACACATAT ACACAAAGAT AATCATAGTT TTACATTGAA GCACATGAAA	60
15	GATAATTCAT TTAAAGGAAG GTATTATCAA TGAATAAAAA AATGGGATTA TTAGTTATGG	120
	CTTATGGCAC ACCTTATAAA GAAAGTGACA TAGAGCCATA TTATACAGAT ATTAGACATG	180
	GTAAACGTCC ATCTGAAGAA GAACTTCAAG ATTTGAAAGA TAGATATGAA TTTATAGGTG	240
20	GTTTATCACC ATTAGCAGGT ACAACAGATG ACCAGGCTGA TCGCTAGTT TCAGCATTAA	300
	ATAAAGCATA TGCAGATGTT GAATTTAAAC TATACTTAGG ATTAAAACAC ATTTCCACCAT	360
	TTATCGAAGA TCGCGTTGAA CAAATGCACA ATGATGGCAT TACTGAAGCA ATCACGGTAG	420
25	TACTAGCACC ACATTATTCT TCATTTTCAG TAGGATCATA TGACAAACGT GCTGATGAAG	480
	AAGCTGCAAA ATATGGTATT CAACTTACAC ATGTGAAACA TTATTATGAA CAACCTAAAT	540
30	TTATTGAATA TTGGACGAAT AAAGTCAACG AAACATTAGC TCAAATACCG GAAGAGGAAC	600
	ATAAAGACAC GGTATTAGTT GTTTCGGCAC ATAGTTTGCC AAAAGGTTTA ATCGAAAAGA	660
	ATAATGATCC ATATCCACAA GAACTAGAAC ATACTGCGCT TTTAATTAAA GAACAATCTA	720
35	ATATTGAACA TATCGCGATT GGTGGAAT CTGAAGGTAA TACAGGTACA CCTTGGTTAG	780
	GGCCAGATGT ACAAGATTTA ACACGTGATT TATATGAAAA ACATCAGTAT AAAAAGTTTA	840
	TATATACGCC AGTAGGTTTT GTATGTGAGC ATTTAGAGGT GCTTTATGAC AATGATTATG	900
40	AATGTAAAGT AGTTTGCGAT GATATTGGTG CGAATTATTA TCGTCCAAA ATGCCGAATA	960
	CACATCCATT ATTTATCGGT GCAATTATTG ATGAAATCAA GTCTATATTT TAATGACGAA	1020
	AGAAGCGTGA AACGTTGTGA CTAAATCAGT GGCTATTATA GGAGCGGGGA TAACAGGTTT	1080
45	ATCAAGTGCA TATTTTTTAA AACAGCAAGA TCCTAATATT GATGTAACCA TCTTTGAAG	1139

(2) INFORMATION FOR SEQ ID NO: 803:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 989 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 803:

TATCCnAAAT AnAAATGTGC GCATTTATCA AAACCTTACA TACAATAGAG TTTTCCCTAA 60
 5 CAGTAAATTA GATATTATTA CACCTGTTGA TATGTCTTCT AATGCCAAAC TGCCAGTTAT 120
 TTTTGGATG CACGGTGGTG GTTATATTGC GGGTGATAAG CAGTATAAAA ACCCATTATT 180
 10 AGCGAAAATT GCTGAACAAG GGTACATTGT TGTGAATGTA AATTATGCAT TGGcGCCACA 240
 ATATAAATAT CCCACACCAT TAATTCAAAT GAATCAAGcA ACTCAATTCA TTAAAGAAAA 300
 TAAAATGAAT TTACCTATTG ATTTTAATCA AGTAATTATT GGCGGTGAYT CTGCAGGTGC 360
 15 TCAATTAGCT AGCCAATTTA CGGCAATACA GACGAATGAT CGCTTAAGAG AAGCCATGAA 420
 ATTTGATCAG TCATTCAAAC CATCGCAAAT TAAAGGTGCT ATACTATTTG GTGGTTTTTA 480
 TAATATGCAA ACAGTTAGAG AAAGTGAGTT TCCAAGAATA CAGTTATTTA TGAAAAGTTA 540
 20 TACTGGCGAA GAAGATTGGG AAAAGAGTTT TAAAAACATT TCACAAATGT CGACAGTAAA 600
 ACAATCGACA AAAAATTATC CaCCAACATT TTTATCTGTT GGAGATAGCG ATCCATTCTGA 660
 AAGTCAAAAT ATAGAATTCA GTAAGAAATT ACAAGAATTG AATGTACCAG TAGATACTTT 720
 25 GTTTTATGAT GGTACGCATC ATTTACATCA TCAGTATCAA TTTCACCTTA ATAAACCTGA 780
 ATCGATAGAT AATATCAAAA AAGTGTTACT TTTCTTAAGT CGTAATACAT CCTCTAGTGG 840
 TATTCAAAC GAAGAGAAAC CACAAATAGA AAATCCGAGT AATGAATTAC CGTTAAATCC 900
 30 TTTAACTAA TGATAAACAG TAGTAATTTA TTAAGTAAAG AACATTTAAG ATTTTCAAAT 960
 TAAAAACGAG AATTTAAAC ATGTGGTGC 989

(2) INFORMATION FOR SEQ ID NO: 804:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 711 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 40 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 804:

45 TAAnCCCTGG TTTAATGATT TTGATTACGT GTTTTTATAA TAAAAACATA TCGAACATTG 60
 ACTACGTTAT TAAGCTGCTT TTTGTACAC TTTATAACCA ATAGCTTAAG ATTTAAACT 120
 50 AATCGGAAAG AACATGATT CACCAAAAA ATATTTATGT TGCTATTAAA AATCAGTTAA 180
 TACGAATGTT AAAATACGTT TGATTTTCAT TAATAATGAT TCAAGTTTAT TTAAATGAGC 240
 GTTAATGTCA GTCTGTTTTG ATGCACCTTA TAATAAGAC AGATAGTTCA AATTACGTAA 300

AAAGCAACAT TAGCATTAGG AATATTA ACT ACAGGTGTGT TTACAGCAGA AAGTCAA ACT 420
 GGTCACGCGA AAGTAGAACT TGATGAGACA CAACGCAAAT ATTATATCAA TATGCTACAT 480
 5 CAATACTATT CTGAAGAAAG TTTTGAACCA ACAAACATTA GTGTAAAAG TGAAGATTAC 540
 TATGGCTCTA ACGTTTTAAA CTTTAAACAA CGAAATAAAG CTTTTAAAGT ATTTTTACTT 600
 GGTGACGATA AAAATAAATA TAAAGAAAAA ACACATGGCC TTGATGTCTT TGCAGTACCT 660
 10 GAATTAATAG ATATAAAAGG TGGCATATAT AGCGTTGGCG GTATAACAAA G 711

(2) INFORMATION FOR SEQ ID NO: 805:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 680 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 805:

ATCAGGAAAA ACAGaATAAT GTAAATCAAG CTGTT CAGCC TCAAAATAAT ACTAATGAAA 60
 25 CATCAAAAGT ACCGGCTAAT TTTGTCAAAT TGAATGATAT TAAACCAGGT GATAC TTCTA 120
 TACAAGGAAC AACTTTACCA AATCAATTTA TACTATTAAC TATTGATAAA AAAGATGTGA 180
 GCTCAGTTGA AGATTCTGAC AGCAGCTTTG TTATGTCTGA TAAAGATGGG AATTTTAAGT 240
 30 ATGACTTAAA TGGTCGCAA ATTGTT CATA ATCAAGAAAT TGAAGTGTCT TCATCAGATC 300
 CCTATTTAGG TGACGATGAA GAAGATGAAG AAGTAGAAGA AACTTCAACT GAAGAAGTTG 360
 35 GTGCTGAGGA AGAAAGTACA GAAGCTAAAAG CTACATATAC AACACCGCGA TATGAAAAAG 420
 CGTATGAAAT ACCGAAAGAA CAGCTAAAAG AAAAAGATGG ACATCACCAA GTTTTTATCG 480
 AACCTATTAC TGAAGGTTCA GGTATTATTA AAGGCCATAC CTCTGTAAAA GGTAAAGTTG 540
 40 CTCTATCTAT TAATaATAAA TTWATTA ACT TTGAGaCAAA TGCTAtGGTG GtCCaAATaA 600
 AGAAGaAGCG AAATCTGGAT CAGAAGGAAT CTGGATGCCT ATTGATGACC AAGGATACTT 660
 TAATTTTGAC TTCAAACGA 680

(2) INFORMATION FOR SEQ ID NO: 806:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 950 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

GTATTTTCATT AGCCATTGGC AATTGACATC TGACAATGAG GAATGGCTTT TGCATTGGAA 60
 TTCACAGTTG GAGTGCATTT ACTGGTTATT TTGGAGGTCA TTGTTGATAC ATTATTAATG 120
 5 GAGAATAACC GAATTTGTGA TGTTATTTCC ATTTTAAATA TTTGCAATTG TATTAAATGC 180
 TGCACTTGGA GATAAAATTA AAAATCCTTA TGGATCTGCC ATAATTCTTG TTCTAGTTAT 240
 TATCGTATTA AGTTGGGGAG GTATTGACAA GACTTGTTTCG TGGTAAAGTA CTTCAAGAAA 300
 10 AAGAAAATGA ATACTTTTTG GCAGCAAAAT CAATTGGTAC ACCCACATAT AAAATTATTT 360
 TGAAACATCT TTTGCCGAAT ATATTAAGTG TAGTTATCGT ACAAGCAACA TTGTTATTTG 420
 CCGGTATGAT TGTAGTGGAA TCAGGrTTGA GCTTTTTAGG ATTCGGAATT AGTAAAGCAA 480
 15 TACCATCTTG GGGTAATATG TTGAGTGATG CTCAAGAAGG GGATGTTATA AGTGGTAAAC 540
 CGTGATATG GATGCCACCT GCTATAATGA TTACATTAAC TATATTAAGT ATAAACTTTG 600
 TAGGGGAAGG GATTAAAGAT GCTTTTAAATC CTAGAGGTAG ACGTTAAATA ATAAAAGAGG 660
 20 CACTAGTTAA TTCTAGTACC TCTTTATTTT ATCTCTTACG TCCTAAACCC ATCGCTTTTT 720
 CCATTTTTTT GACAGTTTTA AATGAACTT TGTGTGCTyT ATCTCTACCT TGATCTAAAA 780
 25 TATCAyCAAG TTTATcTGAG TTATAGAAAC TTTCGTATTT TTCTTGGAAT TCTACTAAAA 840
 ATGCTTTAAC TATTTTCAGCA AGGTCACCTT TAAATTTACC ATAACCTTCG CCCTCATATT 900
 TTGCCTCAAT ATCTTTAATT GGCATGTCTG TTAATCCAGC GTATATTGAA 950

(2) INFORMATION FOR SEQ ID NO: 807:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 418 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 807:

GTTACCAGTC GAAGCTTTAC GACCTGTTAC GAAACATTGT TTACCCATAT GAGTACCTCC 60
 TTTAATAAAT ATAAATACAC ATAACACTT ATATACTTAA TTAAGATAGC ATAGTTTCAT 120
 45 TTGAAAAACA ATGAATAATT TTCACATAAA AGTCAAAAAT ACTGAGTTTT GTGATATAAT 180
 TGTAGACTGT GAAGTTATGT AGTATGATAT TTTAGAGAAA TAAGTGAATG AAACATTTAA 240
 AATTTTTTATT TrATGATACT ACATCTATTA AAAGAAAACG CCTATAGATA ATCGTCaTGA 300
 50 GTGTAAATTC AGTTtACTCa AcAtATAaTA GGkGaTTTAA gCgTAAGtCa TTCTGATAAG 360
 TTGTACCATT GATATTTTAT GAAATAnTCn ATGAACTTAA AGCGTTTATG CTACACTA 418

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 842 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 808:

AAATGGCnATT AATCTTTAAT ACGATGCTTG AGGATTTTTTC CTAATAAAAC CTTGATTTCm 60
 AAAAGGGTTT AAATCmAATG AAACAATAAT AAaAAAATGw CGCAATATAA TAATAAGTAC 120
 AAATTTAATT AAGAAATTAA ATTGATTGTA TATGTATATT TTGGTAACGT AAAAGAGAnA 180
 TATACAAAAT AATTAATTAT TTATATGAAA AGAGAATATA AATGAAGTAT AAAACAGAGA 240
 GACGTGAAGC GATGGGATAT TTAaMAAGGT TTGCATTGTA CATAAGCGTT ATGAYTTTAA 300
 TATTTGCGAT AGCAGGTTGT GGCAAAGGTA ATGAAACAAA AGAAGATTCA AAGGAAGAAC 360
 AAATCAAAAA GAGCTTTGCG AAAACATTAG ATATGTATCC AATTAAGAAT CTCGAGGACT 420
 TATACGACAA AGAAGGATAC CGAGATGGCG AATTTAAAAA GGGTGATAAA GGGATGTGGA 480
 CGATATATAC AGATTTCGCC AAAAGTAATA AACAAGGTGG ATTGAGTAAT GAAGGTATGG 540
 TCTTATACTT AGATAGAAAT ACACGGACTG CAAAGGGACA TTATTTTGTT AAGACATTCT 600
 ATAATAAGGG CAAATTCCCA GATAGAAAAA ATTATAAAGT TGAAATGAAA AATAATAAAA 660
 TTATCTTATT AGATAAAGTA GAAGATACAA ATCTAAAAAA GAGAATAGAA AACTTTAAAT 720
 TTTTGGACA ATATGCAAAC CTTAAAGAAT TGAAAACTA CAACAATGGT GaTGTCyCAA 780
 TTAATGAGAA TGTTCCAAGT TATGACGCAA AATTTAAAAT GAGCAATAAA GATGAAAATG 840
 TT 842

(2) INFORMATION FOR SEQ ID NO: 809:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 451 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 809:

TAAGACTATG CCATCTTGGC AACGCGTTGT CGCATATTCA TTATTAGTAA GTATATGCAA 60
 GCATGATTTT GCCATAACTT TACCTCTTC TATATTAAAG TACCACTTTT ATCATTCCCT 120
 ATAATATTTA ACTTATTTAA TTAAACGTAA ATTAAACACA ATACGAATAC CAAATCAAAA 180

AAAAATAGAT GTAGTCAGTT TAATTAAACT ATCCAATTGA AAACACACTA CTTTTTAGTA 300
 TTTTCAAAAT AATTTTAAAT GACCACATCT ACAACGTATT ACTATTATCT TTTGTTAGTT 360
 5 ATATATTCAT TTTCAATTTA TAAATAAACA CTTATTTAAA TCACATTCTA CTTTTGAGAT 420
 GAGCTCAAAC TAACATTAAA TTGTTTATAT T 451

(2) INFORMATION FOR SEQ ID NO: 810:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 1499 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 810:

ACATTTTGTG CTTGTTGTCC AATCCAATTT CTACTTTGTT GAACAGTATG AGTTGCTTGA 60
 CCACGCATGT TACTCAGCAT TTGTCCAACA TGAGTATTTT GAGCAAAGTT ACGAGATTGA 120
 TTCAACACAC TGTTTTTCAT CATThCCATT TTAGGTGAAA TACGACTAAC TGCTTGTTC 180
 25 ATTGTCTTTT GCAATCCTGT TTTAACTGCA AATTTTCTC CGCCTTTGAA GCCTAATTTT 240
 ATTAAACTTT TCCCAGCACC TTTGAGGAAG CCCATACCTG GCAATGGAAT AAGCGAAAGT 300
 CCTCCATGA TTCGTTCTTC TTTAGATAGC TTTCTTCCAG TTACAATATT TTTTCCTGTG 360
 30 GCTGCATTTG CTGCTGAATA AGCGGAATAA GCACCAATAG CTA CTGCTCC AGCAACAGGA 420
 TTAATACAAG ATAAACTAC CATACCAGCT AGTGCTGCAA TCTCTATAGC TTCTTCTTTT 480
 TTCTTTTGCT CCTCTAGcTC TTCCGCTTCA GCTACTGTCA TGTAATCACA AGAAGCGCCC 540
 35 TGAGTCATCA TTTTTTCAAA ATCATTMTTA GATAATTCT TATCTTCTTT TTTCAATTCT 600
 TTGTAATGCT GATCAATTAC TTTTACAAAT TCTTGATCCG ATTTTAATAT TTCATCGATG 660
 CTATAAACAT CGCTGTCACT TTTCTTGGCA TCTCCCTTTG CAATTTTCCC AGAAGCCCCA 720
 40 TAGGTATCTC TACCATGTCC ACCACCATTT TTAATTAGTA TATTTTCCAA TTTAACATTC 780
 GTTATACCTT TGAATGCTTT ATCTATATCT TCTATAAATG GCGTGTCAAT AATTTCTTTC 840
 45 ATTTTCGAAT CTAATTGAGA TGCATAATCA TATAACTCaT TTTGATAATA CCCCATTAAT 900
 TTAGATCCTT GTGGAcCTAC TACACTACTT GTTAATGATA TTGCGCCATC TTCGTCTAAA 960
 GAACTGACAT CGCTTACCGC ATCATCCATT GTTGTATCTA CATCTAAGAA GTCTTGACCC 1020
 50 TcTATTGCAT CTATTACACT TTGGATAGAT GACTTTTCAT TGTCATAATC AGCTGTTAGA 1080
 TATTCAATAT CTTTTGTCAT GTCATGCACC TATCCCTCAA TATTATAGTA AAGCTTGGCA 1140

CCACCGAGTG TACTCAATGG ACCTTTGAGA CCACTAATGA CTGTTGCAGC ACTACTATAG 1260
 CCATTTTCCA TAGAATGTGC AGCTTTTTCa CTACTGTAGT AATTTAATTG CGCTATTTTT 1320
 5 CCAAAGTTTT GAGCTATTTT ATCATACTTT TGACTTATGC TTTCCAATTC TTTTACAACA 1380
 TGTGCAATCG TTTTCACTTT AACACTAATT TTTCCACTCA ACGTCATTAC TCCTCtGcTt 1440
 TATtAATATG ATTTTcATCA GTATCGAATC CAAATAATTc TCGTGATAAA nGTATTGAA 1499

10 (2) INFORMATION FOR SEQ ID NO: 811:

(i) SEQUENCE CHARACTERISTICS:

- 15 (A) LENGTH: 620 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 811:

CnCGCTGCAC CGAAGAATGC TTTTGGTTTG TGTAAGATG CAGGATCTAA ACCACCTGAT 60
 AATGTACGAC CACTTGGTGG AATAACyAAG TTATAAGCGC GTGCTAATCT CGTTATAGAA 120
 25 TCCATTAAAA TAATGACATC TTCCCCAATT TCTACTAAAC GCTTTGCACG TTCAAGTAAT 180
 AATTCAGCTA CTTTAACATG GTGTTCTGGT GGTTTCGTCAA ACGTTGAATG AACGACTTCA 240
 GCAGCTTCTA CTGAGCGTTC TAAATCTGTT ACCTCTTCAG GACGCTCGCC AACTAACAAA 300
 30 ATAAATAGCT TTGCATCTGG TTTGTTCGTA CTGATTGCAT TCGCTATTTc TTTTAATAAC 360
 GATGTTTTTAC CTGCTTTAGG TGGCGCCACT ATTAAACCAC GTTGACCTAA ACCAATCGGT 420
 GTTACTAAAT CCATGATGCG CGTTGAATAA TTTTGTATTT CTGTCTCTAA TTTAATACGC 480
 35 TCATCTGGAT AAAGTGGTGT CAAAGCTTGG AAATGCGGAC GTTTCTTCAC TTCTTCTGCG 540
 TTATGGTCAT GACAAAGTCA ACTTGAATA AGCCATAATA TTTTTCGTTA TCTTTAGGTT 600
 TTCTAACTTT CCCAGTTACT 620

40 (2) INFORMATION FOR SEQ ID NO: 812:

(i) SEQUENCE CHARACTERISTICS:

- 45 (A) LENGTH: 1094 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 812:

CCGGCTGAAA TTAAGTTCTT GTTATATTTT GCAAAAATGA CAAAGAAAGA TAAAAATAAA 60

TGAAC TATTT GCAATTAGAG AATTGTTAGA GAAAGGTTTG ATTGGTGATT GTATTCAACC 180
 TATAATTGAA CCAATTAAAT ATACAACCAC ATTTAAAAAT ACTTTGCAAT ACTGTGGTGA 240
 5 AAAAGCATT C TCTATAAATT TAGTAGTAAA TTCAAAGTTA ACTGAAGAAG AGATTAGTAA 300
 CGAAaCTGt GCACATTTAA CTGAAATAAT AACAAAAAAC AAAAGTGTTA TTCAAAAAGC 360
 10 TTACTTGGGT CCTTCTGATG AAGGCAATGA TAGGTTGAAA CAGCAATTTT CAAGTAATAG 420
 TTTAGCTATT TTAACAAGTG TAGATGATTG GGAAATGTTT GGAGATAAAA ATAACTTGA 480
 AATGGTTTTT GTACCAGATG ATAGACACAT TAAACGTAAA TTGCGTAATA TTCCAAACAA 540
 15 AGGCATsATT ATGGATCCTT TTAATAAACT AAGTCGTAAT GTTGATTATT TAGATAATGA 600
 TGACGAGTTT TATAGCGACG ATCACCTTTA TTATAAGGAA GATGGATACG TAGCATTTTC 660
 AGACTATTCT GTTATAGGTG GAGAATATGT AGACGGTGGC TTTTCGCCAT TAGCtATTGc 720
 20 GrTACATATT GTCTATTTTG ATGAGGCTAA TGAGCTAAGA GTTAAGCATT TtGTCTCTGa 780
 TTCTAATAAT GATAGATCAA ATCCAGGTAA AAnGTTTTTT GAGGCTGTAG ATAAATTAGT 840
 AACATGGTCA AAAAaCTTAG ATATTAAAA TAGATCTTAT GCGCTTGGAC AATTTGAAGA 900
 25 ATTAAATGAA AATAATAAGT ATCCAGGATT AGGTTTAATT AAAnGTTATC TATCAGCATC 960
 ACCTAGAAAT TATGAATAGA TACTGGGTCT CAAAGAAATA GGAAAAGTTT ATATCGAACT 1020
 30 GAACTGCAAG AATGCATTGA CATGGATGAA CACACGGGTA AAATGATCGC AGCTGAAATG 1080
 ACTATGGTAT TAGC 1094

(2) INFORMATION FOR SEQ ID NO: 813:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 930 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 813:

CACCTATCAT CGTCTCTTTA ATTCTATCTA TCTATTACC CCAATCGTAA ATATGATGGA 60
 45 CGTTATAGAA TACCAAGAGT TGCAGGTATn TCTATTATTT ATCTAGCTGT AGTAGGTGTT 120
 ATTACGTTAA TTGTTAATTT ATTGATACCT ATTATTGGTT CGCAAGTAGA TAGTTTAGTT 180
 50 AAAAATTCAC CGCAATATCT AGAAAAATTA ATTAATTCTA TTGATAAAAT AGCAAATAAT 240
 ACGTTTTTCT CTTCGTATTA TAGTCAAATT AATGATTGGT TAAATTCTTT ACCTAAGAAA 300
 ATACCATCTA TGTTAAGTGA ATTTACAGAT GGCTTTGGGT CTAAAATTGC AACGTTTGCA 360

CTTAAAGATG GACATCACTT CAAAGAATTT TCAACGAATA TTATGCCACC GAAATTCCGA 480
 AAAGATTTTC ATGATCTACT TGAAAAAATG AGTGTTCAAG TTGGTTCATA CATTCAAGGA 540
 5 CAAATTATCG TTTCATTCTG TATCGGTATA CTGTTGTTTA TCGGTTATTC GGTTATCGGG 600
 TTGAAATATA GCTTAGTATT AGCTAGTATT GCGGCAGTTA CAAGTGTTGT ACCATATTTA 660
 10 GGGCCTACTA TAGCGATTTT TcCAGCTATT GTAATnGCTG CTATAACAYC GCCGTGGATG 720
 CTCTTAAAAT TAGCAGTAGT ATGGACTTTA GTACAATTTG TTGAAGGGCA CTTCAATTTCA 780
 CCAAATATCA TGGGTAAAAC ACTTAAGATT CATCCACTTA CAATCATTTT CATTTTACTG 840
 15 TGTGCAGGCA AATTGCTTGG TATTGTAGGC GTTATTTTAG GTATTCCGGG ATATGCTATT 900
 TTAAAAGTAT TtAGTTACTC ATTTATTCCA 930

(2) INFORMATION FOR SEQ ID NO: 814:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 461 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 814:

GTATGATTGC TGTTTTAATA CCAGATGATG GCAGTGGCAA ATCTTATGAC TATATGCTTG 60
 TGAACCCAAA AATTGTAAGT CATAGCGTTC AAGAAGCTTA TTTACCAACT GGTGAAGGTT 120
 GCCTTAGTGT CGATGATAAT GTTGCTGGTC TAGTTCACCG TCATAATAGA ATTACAATTA 180
 35 AAGCCAAAGA CATCGAAGGT AATGATATAC AATTACGACT AAmAGGATAT CCAGCAATTG 240
 TTTTCCAACA TGAAATTGAC CATTTAAATG GTGTAATGTT CTATGATCAC ATTGACAAAG 300
 ATCACCCATT ACAACCACAT ACAGATGCAG TAGAAGTTaA aACACATTTT cTAATTATCA 360
 40 AAgCTTAGGA TAAtATGATG tCCTAAGCTT TcCTTTACAA CTTTTCGGAT AACCAACAGT 420
 TAATATATCA CCTTCTAACC AAACTTTTAA TCCCTCATTA A 461

(2) INFORMATION FOR SEQ ID NO: 815:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 573 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 815:

	AACGATATAA TAGAATTGAA TAAAGTGGGT GATAATGTGA CTAAAAATGA GATTAGAAAA	120
	TACATTTTAC ATAAAATGAA GAATTTTAAAT AAAGCTGAAA AGCGAAAAGC AGACACATGG	180
5	TTAAGAAATC AATTTTTTGC AACTGAAGAA TACAAAGAAG CAAACGCAAT TCGGCTAGTT	240
	CTTCTTTTAA ATCATGAAGT AGATACTTTT TCTATTATTG AACAAGCCTT AATGGATCAT	300
	AAACGTATTT TTGTACCGAA AATGGATTAT TTAAATCATC AAATGACTTT TAAAGAGATA	360
10	TTTAATCTCA AAGATATTGA TGTCGATAAT AAGGGGATTT ACTATCCAAC TTCAAAAGGT	420
	GAAACAACGA ATAACCTAGA TTTAATTGTT GTTCCTGGTG TTGGATTTCA AGACGATGGA	480
15	TATAGAATTG GGTATGGTGG TGGCTATTAC GACAGGTTTT TAGCTAATTA TCAGACAAAG	540
	ACAATAAGCT TATTATACGA TTTTCAAATA ACA	573

(2) INFORMATION FOR SEQ ID NO: 816:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 3989 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 816:

	TAGTTTAAACA ATGTCTATTC TCATAGAATT TGTCCAATA AATGTAGACG ATTCACTAAA	60
30	CTTCTAAAAA AATAAACCCC AAATTATAAT AGTCTCAATA TTAATATATT ACAATTTATT	120
	CATAGGATTT TTATCATTTT AATTAATAGG TTGTTATCAG GGTAAATAA ACATTTTTTG	180
35	TAATAGTCCT TTTTACGTT CTTTAAATAA CTCAATTCTA TTCATTTGAT TATTCATTTT	240
	ATTGTCTATA GATTTTAAACA ATGCACTTAC TTTATCTGT TCAGTGAGAC AAGGTATTTT	300
	AAGATTTATA TTGCATAAGT TCGCATGAGT TAATTTAGCT GGTGCATTAC CTGTGACAAA	360
40	TGCTCGTAGT TCTTTAAAT TTAAATAATA ATTCATAAAA AACAAATTAT GATCATTACT	420
	TTTAACTACA TGCGCATGAT TATTTACCCA GTATTGCCCA TTAGCAATAA AGCTACTCGT	480
	CTCAAACTGC CCCCATTTTG CACCATCTTC TCCTATTAGT AATCGTTCTT CATTATTGAA	540
45	TAAATAATCT TTTACGTAAT CAATAATTCC AGTTGCACCA TAGTAAGGGT ATAACCCCTT	600
	TTCTCTTAAT GAAGAAGTAA TTGGTTTTCT TCTATTATTT TCAAAGATAA AGATGTCTTT	660
50	TATGAATTTG TTTTCCCACT CTGGATATTC TTCACCATTC TCATCTTTGA ATCGCAATTC	720
	TTGTGTGAAG ATTTTCTGCA TATAGCCTTT TTTCTGTTGT TGAAGCAATT CAAGTTTTTG	780
	TTCTTCTAAT TCAATTTGTC GGTGAGTTT GCTGAAGAAC TTGCCTATTT TTTGCTGTTT	840

	TCGACTACCT	CCACTTTGTG	CAAGGAAAAT	TTTCCTTTTA	CCTTTTCTTG	ATAATAGATA	960
	CTGTCCAAAA	AAATTATAAT	AATACTCTTT	TTTCAATCTA	ATAATACATA	CATGTTGATT	1020
5	TAAATTAGCA	TGCGTTTCAA	CTATCGAATT	AATGGCTGTT	CTACCTATTG	ATGCTCCTGT	1080
	AATATTTAAA	AGAACATCAC	CATAGTACGT	TCTACTATTT	TTCATCTCAT	CATCTATATC	1140
	TTTACTAATA	TAAACTAAGT	CATTAAGATT	TAATTTACCA	TTTCTAATAT	TTTGACTCCT	1200
10	TAAAAATGGT	ATGCCTTTGT	TTGTATAGTT	TTCACTTCCA	CCTTTGGGAG	TCTTTCCACT	1260
	ACCTATTTTG	GTAGTAAGAT	TCCCTAACTT	CTTCTCTTCC	CATTGCGCTT	CAAATCCTGG	1320
	GAATCTCAAC	TCTGGCACAT	TTTTCGTTTG	TGTATTACTC	ATCTTTCAAC	ACCCCAAGTT	1380
15	CITTCAGGTA	TGCAITGATT	TCTTGTTCAA	TTTCTGCGAT	TTCTTTGTCT	ATATTTTTCA	1440
	AATCTTGTTG	GACTTGATCT	AAATCAATTG	GTGCTTCTTC	TTCGAATGTA	TCAACATATC	1500
20	GCGGTATGTT	TAAGTTGTAA	TCGTTATCGG	CGATCTCTTG	TAATGTCGCG	CTGTAGCTAT	1560
	ATTTATCAAT	CGTTGCTTTA	CGCTTATATG	TGTCTATAAT	ACGTTGACT	TGGGCATCGC	1620
	TTAAATGGTT	TTGATTTTTT	CCTTTTTC	AATCATTGGA	TGCATCGATA	AATAGTACGT	1680
25	TGTCGTCTTG	TTGGCGACAT	TTTTTAAATA	CTAAAATACA	TGTTGGAATA	CTTGTCCCAT	1740
	AGAAAATATT	GGCTGGTAAC	CCAATCACGG	CTTCTAAGTA	GTTCTTTTCT	TCTATTAAAT	1800
	AGCGACGAAT	CACACCTTCT	GCGGCACCAC	GGAATAATAC	ACCATGTGGG	aGTACGACTG	1860
30	CCATGGTACC	TTCATCGTCT	AGGTAATGTA	CCATGTGTTG	AATAAAGGCA	AAGTCTGCTT	1920
	TGGaTTTTGG	CGCAAgCTTG	CCGTAACCAC	TGAATCGTTC	ATCATTTTCA	AATTTTGAAT	1980
35	CTGCTGTCCA	TTTCGCACTG	TATGGTGGGT	TCGCAATAAC	CGCATCAAAT	GTATTGCCTA	2040
	AAAAGGCTGG	ATTTTCCAAT	GTGTCATCAT	TACGGATCTC	GAAGTTCTCA	TAACGCACAT	2100
	CATGTAATAA	CATATTCAAT	CGTGCTAAGT	TGTATGTAGT	ATTGTTACGT	TCTTGTCCGA	2160
40	AATAACGATA	CACTTGCGTT	TCTTTACCAA	CACGTAACAA	CAATGAACCG	GAACCACATG	2220
	TTGGGTCGTA	CACGTGACGT	AATTTATCTT	TACCGTCTGT	GACAATCTTC	GCCAGTATCT	2280
	TAGATACTTG	TTGTGGTGTA	TAGAACTCGC	CTGCTTTTTT	ACCCGcTGTC	GCCGCAAAGC	2340
45	GCCCGATTAG	GAATTCATAT	GCATCACCTA	ACATATCAAT	TTCCATGTCA	CTGTGAACGA	2400
	ATGGTAAGTC	GTCAAGATTA	ACCATGACTT	TAGAGATTAA	AGCAGTACGT	TCTTTGACAT	2460
50	TGTTACCTAG	TCGCGTTGAA	CTCAAATCCA	TATCGCTGAA	CAGCCCGATA	AAGTCATTTT	2520
	CACTTTCTTC	ACCTAATGTA	GATGTTTCAA	CTTTGCGAAT	CGCCGTCGCT	AGATGTTCTA	2580
	TATCGAAATC	TTGCGTTTCA	ATTTACAGAA	TCATCGCACT	GAATAAATCT	TGTGGCTCAA	2640

	CCCATGCTTC TTGATACGTG ATGTCTTCAC CTGACAAGGC ATCTGCATAT TCTTGTTCCG	2760
	CTTTTTCAGA TAAGAAGCGA TAGAAAATCA AGCCTAAAAT GTAATTACGG AATTCACCTCG	2820
5	CATCCATGTT CCCTCTTAAA TCATTCGCAA TCGACCATAA TTTTTTATGT AATTCAGCTT	2880
	GTTGCTGACG TTGTTTTTCA GTAATAGACA TGTGATTCCCT CCGCCTTTGC ATAAGTAATT	2940
	TATCTCTTTG TGTAATAGAT TTATTATAAC ATTTGGTTAT GTTGCGATGT TGATAATTTG	3000
10	GATGTTGGTG GTGGAAATTT TGAGTTTTAG TGGCGCAATT GTTATTGAAA AATTTTATAG	3060
	AAATGTTGTA GCTTTCAAAT GCTTTCAAAA TCATTTATAT TCTTAATGAT GTCAAAAAGT	3120
	TGTTCAATCA TACATAAATA AAACCAATCA ACAATTGAGT TGGTGAAAAT CAATCGTTGA	3180
15	TTGGCTTTGA TGCATATTAA ATAATGCAAT ATATATTAAT AAATGTTAGT TATAGTATAT	3240
	TTTGTCAGGA TTGGGTGAAT GTCTAAGTTT TAATTATTTA TCTAAATTAT CTGCAATGAA	3300
20	TTTCTTAATT TCAGGAGAGA AATAAACAGC AAATCCTCTT GTGCTTTCAC CTGATGGCTT	3360
	ATTACCGGCA TAGATTACAC CAATAGCTTC GTGTTTACTA TTTAATATAG GTGAACCAGA	3420
	GCTACCAGGC TGAATAATTG CATCCGATGA CACTATATTC CCATTCACTG ATAATACTTT	3480
25	ACCAGTTGAT TCATACATTT GTAGTTTATT TCCATTAGGA TTTGGATAAC CAATGACTGA	3540
	TATAGGTTCA TTTTCTTTAG CTTCTGATGC TATATTAAAT TTACTAGTGA AATCTTTGAA	3600
	TTTTCTACCT TTTGGTTGTG TTGATTTTTT TCCAACTTGT ACAACCGCAA TATCTTCTTT	3660
30	ACCAGGATAA TCTACAATCT TAGTAACTTT ATAAAGTCCA CCACCGTTAT TATAAAAACC	3720
	ATTAGGATGT GCTTTGATTT CATCACCGAC TTTCATGTGA TAGGTAACAT GTTTATTGGT	3780
35	AATGATTGTA TGATTTCCAA CTACAAATCC TGTTCCAGCG CCCATCCATG TAACACCACT	3840
	GTATGGTGCA ACATTGTAT TTGTAATTTG TTTAACAGTA TTTTCGGCTT TGGCTGTTTG	3900
	TTGAATACCT TCAACCATTG TTGTGCCGAC ACCAGTTATT GATGTTAAAA TCGTCAATGC	3960
40	TGCAATACTT TTGATGATTA TATTTTTAT	3989

(2) INFORMATION FOR SEQ ID NO: 817:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 904 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 817:

CGTTGAGCAC AGTTTTAGAT AATAGATAAT CTTGctCTAG TTGTTGCAAT GTCTGCGATT	60
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	TATGCGTGTA ACGTTCAGTT ATCGTTTCTA AGGTATACTG AGATGTATTT AATTGATATC	180
	CTTTAGATTT AATACTTACG ATGATATCAT CCATAAAATT GCTATTGATA ACATGGATAT	240
5	CATTGCGAAC TGTGCGGTTT GAAACATTGA CATGTTTAGC AATTTCATTGA GAACTAATGT	300
	GCTTTGATGG ATTTTTTAATA AAAAAGTGGG GTAGTTTTTA GTGTCTATCA AGCATTTAAC	360
	ATGTACCTCC TTTCTAAATT TTTCGTGTAA GCGTTTTTAA GGGTGTATTA ATATTATTAA	420
10	ACATGAGAGC TTATACATAC GTCAATGACA TTAAAGCGAA CTTTATATATG ATTTTAACAG	480
	AGTGCGAATT ATGCAAATAA AGAACAGCAG TAAGATATTT CAAATAGAAA AATATCTCAC	540
	TGCTGTTTTT CTGAATTTAT GCATCTGGTA CTGTGAGACG TATCAGGCAA ATGATTAAAT	600
15	TTTAGGTGAT TGTGCTTGAG GTGTTTGTTT AGAAGGCGTA TTGGTATTAT TTGATTTATT	660
	AGCAGGTGGT GTGTTCTGTT GTTGATTATT TTGGTTGTTT GTTGACGATT GACTGCCACC	720
20	ACCGTGAGTA TTATTTTTAT TTGAATTTGA GTCTTTTGGC TGAGCTGGTT GCGTATTCGA	780
	TGGTACTGTT GAATGGTTGT TAGGAACATT TGACGGTGAA GATGGTTGAT TGTCAATAGT	840
	AACGTTATTG CCATTATTTT GATTtTTATC TGTTTTGTCT GCACTATCAT CTTGTTGATC	900
25	ATTT	904

(2) INFORMATION FOR SEQ ID NO: 818:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1104 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 818:

	TTTAACatGa TAATAAAAAA TCTTTTGTTA TATCATTAGG AATATTTGAT GAACTTGATA	60
40	TTAAGGTAC ATTTTGAGAA ATGGACTTAG GGATATTTCC ACTATTATTT AGTAAGAAAT	120
	CTTTAGCTAA TAAAGATTTT CCTACACCAT TTTTACCAAC AATGTGATTG ATCTGACCAA	180
	GATAGAAATT TAAATCACAA TTGTCAACTA GTTGTGTTT TTTAACTTTT AAAGAATAGT	240
45	TATTTAGTTT CATGTATACA ACTCCTATGT ATAAAGGGAT TTATTACACC GATATTTAAT	300
	TGTATTTTTTA AAAATTCTtTT CACATTATGT ATAGAwGTTA TAAATTAGTA TATCaCACTA	360
	TATTTtGkCT AAATGATAAA TATATCGTTA TATTTTTACA ATATTCTGAA ATTTATGTTC	420
50	GCCTCTGAAT GCTATATCCA GTGTAATGTG TTTTGCATAT ATGAAAGCAA TTTCAAATG	480
	TGAATATAGG TTCATTGTGG TATGACAAAC TTCATTGCTT GTCATGAGAT GGATATAATG	540

GACGGGACGT TTTTAGATTG AAAAAAGACA TATGATAAAC TTAGATTGGA AGCGATTTTT 660
 ACTGAACTTA GAAATAGAGA TATTACATTT ATTGCTGCGA GTGGCAATCA ATATGCGAAG 720
 5 TTGAAGTCTA TTTTCGGGGA TAGAGATATG TATTTTATTT CTGAAAATGG TGCAGTTATT 780
 TATAATGGCA ATGAGTTATA TAATTATAAA AGCTTTAATC GTCAGGTGTT TCAACAGGTT 840
 GTCGATTACT TAAATATGAA GCAAAGTATT GATCAACTCG TCATCTGTGG TTTGAAAAGC 900
 10 GCGTATATTT TAAACATAC TTCTGAAGCG TTAAAGAAG ATACGAGATT TTATTATCAT 960
 CAGTTAAAAG AAATTGACAG TCTACAGCAA TTACCTGAGG ATGATTATGT CAAATAGCA 1020
 15 TTAAATATTA ATCGTGAGAC GCATCCGAAT GTTGACGAAG AAGTAGCAAC GCAATTCAGC 1080
 AATGATATTA AACTTGTCTC AAGT 1104

(2) INFORMATION FOR SEQ ID NO: 819:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 1425 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 819:

CCChTTTTAC GGATTAAnGG CTTTTTCCTA TTTAAACCT ACGGCATTTT CTTTTCAACC 60
 30 ACGGCGGCTC CCATATGGAT GGTATnGGGA TTGGGGTTTA TAAAATGGGG ATTGGAAATG 120
 GTCCATCCTA AATACTCAGT TTAGTGCTTA TTTCTTTAG TGCTGACGAA TAAATATGAT 180
 35 CTAACCTCTAC GAAACCTAAT AACGTATCAA ATGCTTCATC ACCATTTTCA AATTTACTTA 240
 AACTATTTTT AAAATCATGT CGCAAATCCT CTAAATATAG TGATGGTTTT CGATCTACAT 300
 ACATTTTTAT ACTAACCTCC GATATATAAT CATCTTTATT GTACCTAACA TTTTATTAAG 360
 40 ATAATACTAA TACACTATCG AACTTTGGGC TGATACTGAA ACAGCACAAA GAAACTCAA 420
 CAATTCGAAT TATGTATCAA AACCTTCAAT TACAGGAAGT GATTTTAAAA TGATTAAACG 480
 CAAAAAACA CCTGTTACCG TTATATAGGT ACAAGTGCTT AATTGATAGA GATGTTATAC 540
 45 GTCTTTAAAT GATTCCACAA CTTTGGATG TGGACCATCC ATAAGCGGTT CTCTTTGTCTG 600
 AACGCCACCA CTTGTTGTC CAATTGATTC GCTATCAAAG TACGATTTAT CTTGATTGGA 660
 50 TTGTTCTTGA ATATGTTCTT CATTATCAGT TGTTGCATAT TCACTATCCA CCTCTGTTTT 720
 TTCCATTGTT GCTGTATGGA ATTGTACGAA GTTCTCTTCT TCTAATGCTT TGATTCTTC 780
 TTTGATAAC GCTCGATACC AATCTTTCGC TTTTTTCGCC GCAaTAGGAa CAaCAtCTTT 840

	TACTTCAAAT TCTTTCCATT TTTCGGGGTA ACCTTTCATT GTAAAGGGCA TTCCCTTAAC	960
	CTCCAATATG TTATAATTCA TGTTATATAC CACCATAATT ATAAAAATGAA ACATATTAAA	1020
5	CACAAATTTT TAGACTCCCG TCATAATAAC TTCAGACAAA CGTTAGTCTG ACCTGATAAA	1080
	TATTTAATTT TAAACGTTCT TGTCTCTCTC ACGAAAACCA TTGTGTTGAA TATTCATCAT	1140
10	TGCTGATTGA ATATAATTAT ACTGTGGTAA ATCTGGTAAT ATCTTTATTT CTAATTCTGT	1200
	ATTTAATTCG AAATGCTTAG CGATGTTTTT AAATATTGCT AAATACTCGC CCATTAATTG	1260
	TTCAATTTATT GTAAGTCTAT CTTCATTAGC CATGGCTCTA TTTAACATAA AGCTAATTTT	1320
15	TTCTAATGCG AATAAGCTAG GATAATAATT TTGAATCAAT GTCTTATCAC TAAATAATTC	1380
	ACCATTAGCT GCATTATAAA CTTGCGTGCA TGTATTTTAA TTTGC	1425

(2) INFORMATION FOR SEQ ID NO: 820:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1165 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 820:

30	nCGnCCCTTAT ATATGTTTTT CATGTCCTAC AAAAAACGAA ATATTCCAAT TGCCTATATA	60
	CAGATATTCA TTAATGACAC ACTCAATAGC AACCATnACA ATATTATGTT ACCTATTTAA	120
	ATGAAATAGT TCTTTTAAAG AAATACATTT TTCACATATT AATCTATAAT CAAAATCAAC	180
35	TGACCGATAT TCTATAATTT ATGATTAAAA TAAGTTATAA TATAATAGTA AAGATAAAGA	240
	TAGAGGTGGC TATAATGTGT GGACTIONAGAA GTATAACATT AGGTACaACA AATATAGAAC	300
	AGACaAAAACa TTTTCATGGTT GACATATTAG GATTAAATTA TGAAGAACTT CTTGAAAACT	360
40	CAATTCGTTT CGGCGATGCA GATATAAGCC CAGGAACAAG ACTTCAATTT ATACAAGTTC	420
	CAAGTGAGCA ATTAGAAGAA TCTCACTTTG TGGGTATTGG ATTACGTACA CCAACTGACT	480
	CAGGTTTAGA GGAGTATGCG GAAATATTAT CGAATAAGGA TATTCCATTT ACAACAGTTA	540
45	AAGAATTAAA TGGCAATAAA TATTTTCAGTC TCGAAGATAA CAATGGTCAT ATTTTCTCAA	600
	TATATTCAAA CGAGAATAAT TATGGCGTTG GTTTAGGTAT GCCTTCTTyT GAGAGTGCGG	660
50	TCAATCCGTT ACATCAAGTG CAAGGTTTAG GACCAGTGAT TCTTAAAGTG AATCATGTAG	720
	ATATTACAGG TCAAATTTTA ACAAATATAT TCGGACTTGA AGTATTTGCA GAATACCAAC	780
55	CCTTCGACAA TGCTGACTAT CATGTCCAAG TATTCAAAGT TGGAACGGGT GGTCTAGGTG	840

ATCAAGTTGA GTTTGAAACG AAAGATGCAG ATTTCTTTAA TCAAGCGAAA TCGCGCTTAG 960
 ATGAAGTGGA AATACCATAT CAAACGCTTG AGCAAGATGA TATTGAATCA ATTAGAaTTA 1020
 5 CTGAAAACAG TGGATTATCG TTTATATTCA CTTTACAAAA ATAATTTTTT TACGATAGCG 1080
 AGGACAAAAT TTATGTTACA TGAACTTGG AAAGAACGTA CACCAATCAA GAAAGTAGAA 1140
 GTCATTAATA CAGATGCAAA GAAAT 1165

10 (2) INFORMATION FOR SEQ ID NO: 821:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 15 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 821:

TCGCCCAATT ATTATGAAAT ATTCAATACA GTTTATTGAT CAAAAACAA AAATCCATTA 60
 TGAACCTTGT CATCACGAAT ATTAAGTAC GTTAGATGGA CCTCTTTAAT GATAGAACAA 120
 25 TTAATAAATA ATGCACTTAA GTATGCGAGA GGTAAAGATA TATGGATTGA ATTTGATGAG 180
 CAATCCAATC AATTACACGT AAAAGATAAT GGTATCGGTA TTAGTGAAGG nACTTGCCTA 240
 AAATATTTGA TAAGGGCTAT TCAGGTTATA ATGGCCAGCG CCAAAGTAAC TCAAGTGGGA 300
 30 TTGGTTTATT TATCGTAAAA CCAATTTTCA ACACACACAA ACCATCCGTT TCCGTCGTAT 360
 CTAAACAAAT GAGGGTACAA CCnTTACGAn TnCCATTTCC 400

35 (2) INFORMATION FOR SEQ ID NO: 822:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 760 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 40 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 822:

45 TGATATAATA CTTTGTGAAA GAAAAGCATG TGTGGGAGGT ATGACCTGTA TGTCGAACGA 60
 AATACTTATC GTAGATGATG AGGATAGAAT CAGAAGATTA CTTAAAATGT ATTTAGAAAG 120
 AGAATCTTTT GAAATCCATG AAGCAAGTAA TGGCCAAGAG GCTTATGAAC TTGCAATGGA 180
 50 GAATAATTAT GCTTGCATAC TACTAGATTT AATGTTGCCT GAAATGGATG GTATCCAGGT 240
 GGCAACTAAA TTGCGTGAAC ATAAACAAAC ACCGATTATT ATGTTGACTG CTAAAGGTGA 300

TTCACCAAGA GAAGTAGTCT TAAGAGTTAA AGCACTTCTA AGAAGAACGC AATCTACAAC 420
 TGTAGAACAA AGCGAACCTC ACGCACGTGA TGTGATTGAA TTAAACATT TAGAAATAGA 480
 5 TAATGATGCA CATCGCGTAC TTGCTGATAA TCAAGAAGTT AATTGACTC CTAAAGAGTA 540
 CGAATTATTA ATATATTTAG CTAACACACC AAATAAAGTA TTTGACCGTG AACCAATTATT 600
 AAAAGAAGTT TGGCATTATG AATTCTATGG TGATTTAAGA ACAGTTGATA CTCATGTTAA 660
 10 ACGcTTAGAG AAAAGTTAAA TCGTGTGTCT AGTGAAGCTG CGCATATGAT TCAAACAGTC 720
 TGGGGCGTTG GGTATAAATT TGAGGTTAAA TCTAATGATG 760

(2) INFORMATION FOR SEQ ID NO: 823:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 465 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 20 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 823:

25 CAAAGGAAAT TGCACAATTA GAAGACCGAT TACGTTACG CTTTGAATGG GGGCTAATTG 60
 TTGATATTAC GCCACCAGAT TATGAACTC GAATGGCAAT TTTGCAGAAG AAAATTGAAG 120
 AAGAAAAATT AGATATTCCA CCAGAAGCTT TAAATTATAT AGCAAATCAA ATTCAATCTA 180
 30 ATATTCTGTA ATTAGAAGGT GCATTAACAC GTTTACTTGC ATATTCACAA TTATTAGGAA 240
 AACCAATTAC AACTGAATTA ACTGCTGAAG CTTTAAAGA TATCATTCAA GCACCAAAAT 300
 CTAAAAAGAT TACCATCCAA GATATtCAAA AAATTGTAGG CCAGTACTAT aATGTTAGAA 360
 35 TTGAAGaTTT CAGTGcAAAA mAACGTACAA AGTCAATTGC ATATCCGCGT CAAATAGCTA 420
 TGTcTTGTCy AGaGAGCTTA CAGATTTCTC ATTACCTAAA AATTG 465

(2) INFORMATION FOR SEQ ID NO: 824:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 355 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 45 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 824:

50 CACCGCGGTG GCGGACGCTC TAGAACTAGT GGATCCCCCG GGCTGCAGGA ATTCGGCAGC 60
 AGGTAAGGAG GTCTCTGTAC CATGGCTCGT ACAAAGCAGA CTGCCCCGAA ATCGACCGGT 120

GGAGGGGTGA AGAAACCTCA TCGTTACAGG CCTGGTACTG TGGCGCTCCG TGAAATTAGA 240
 CGTTATCAGA AGTCCACTGA ACTTCTGATT CGCAAACCTC CCTTCCArCG TCTnGTGCGA 300
 5 GAAATTGCTC AgGACTTTaa AACAGATCTG CGCTTCCaA GCGCACTATC GGTGG 355

(2) INFORMATION FOR SEQ ID NO: 825:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1099 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 825:

TTCACCTGGC TTGTTGactG ACTTGTAatAT GATGATGTGC TTTGTGAATC GGATTCGCTC 60
 GTGCTTGAC TTGTTGAGTT TGAGGCACTT TGGCTTGCTG AGTTTGAGTC TACTCCGCTT 120
 TGATTCATTG AGGCACTTAG TGACAATGAT GTACTCGTTG AGTCAGACAA ACTTGTACTC 180
 GTTGACGTAC TTGTACTTCC TGATGTTGAT TGAGACATAC TTATGCTCAT TGATGTTGAA 240
 25 TCGGATTTAC TTTCACTTGA TGATGTTGAG TCGGATTCAC TTTCACTTGT AGAACCACCTT 300
 AATGATGTGG ATGTACTAAT GGAATCAGAT TTACTTGAC TGATTGAATC ACTTGTCGAC 360
 ATTGATGTAC TTAATGAATC AGACTTACTA TCACCTGTGG AATCACTTAA TGATGTTGAC 420
 30 AAACCTGTAG AGTCAGACAA ACTTGTACTC GTTGACATAC TCAGTGATGT TGAAACACTC 480
 TCGCTCTTAA ACGTTGACGT TGATTCACTG ATACTTGTCG ATGTTGAAAT GGACGTAATA 540
 CCACTTGTTG AATTACTTAA TGATGTTGAT GTGCTACCAG ATTCTGATGT ACTGTCTGAT 600
 35 AATGACGTAC TCTCACTTGT CGAACTACTC ACTGACTCTG ATGTTGATTC AGACGTACTT 660
 TCACTTAATG ATTCACTTAA AAAGGCAGAT GCACTTTGTG ATTCTGAATC GCTAGTACTA 720
 TTTGATTCAC TTAATGATAT AAACGTGCTC TCTGAAGCAG ATATTGCTTC ACTTATAGAG 780
 TCGCTCGTTG ACGTTGATTC ACTTATTGAA TCAGACTCTG ATGTACTTAA GCTTGTGGAA 840
 TCACTCaTAG ATGTTGaTGT ACGTTCTGAA TTACTTGAC TTAACGATGT CGAAGTACTT 900
 45 ACCGAACCAG ATGTGCTCGT AGAAGCACTT TgTGATATTG ATTCACTTGA TGCAGTTGAT 960
 GCTGATTTGC TATCACTCGT TGAATCACTA AACGACGTTG ATATGCTCAt TGAATCGGAT 1020
 TGACTTGAC TCAntGAACC AGACGTACTT TGTGATTCCG AAGTACGTAC TGAAGCACTT 1080
 50 GTCGACGTTG ATGTACTTG 1099

(2) INFORMATION FOR SEQ ID NO: 826:

(A) LENGTH: 338 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 826:

10 TATGCGTATC CTGATAGTCA CTTTGATTTT GATATGGAAT TAGCGAAAGA GCAATCTCAA 60
 GACAATCCAG TTTACTATGC TCAATATGCA CATGCGCGTA TTTGTTCAAT TTTAAAACAA 120
 GCGAAAGAGC AAGGTATTGA AGTGACTGCT GCGAATGATT TTACAACGAT TACTAATGAA 180
 15 AAAGCGATTG AATTGTTGAA AAAAGTAGCT GATTCGGAnC CTACAATTGA AAGTGCTGCT 240
 GAGCATAGAT CGGCACATAG AATTACTAAT TATATCCAAG ATTTAGCCTT CTCATTCCAT 300
 AAATTCnATA ATGCTGAAAA GTGTACCAGT TGGTATTG 338

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(2) INFORMATION FOR SEQ ID NO: 827:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 838 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 827:

30 GTATTTTCTT TCGCGAATGA TTTTATTACT TGAATACCAC GAATAACCTC CAATACCTTT 60
 TCCACTAATT GGTTTTGTAC ATTATGATAC GcTGCGCAT TTTGTCGACT CTTTCTTTCT 120
 35 AATAATTGAA TCGCAAAAAA TGATAGTAAT ACGCCAATGC ATGCTAATAA TGATACTTGC 180
 CACGAAACTA CAAGTAGAGA CAATATGAGT ACTGTAATTA ATATGTATCC ATTAACAACA 240
 ACGTCCACCA TTTTCATAGC AAAGTTTTCT AAAAAGGTTA AATCTGTTGT TACTATTGTT 300
 40 GTTAACTCAT TTGAATGATG CGAATTAAAA TAACCTAACC TTACATTTTT CAATTTATCC 360
 CCTATATCTA AACGTTCTTT CGCACTCATT TCATAAGCGA TGCTCTCATG GCTTTTGCTT 420
 TTGAAATATG CTGTAATAAA TCGTCCAATC ACTAATAAAA CCATGATAAT TACAACATTC 480
 45 AATATATCTT TCATATAAAT AGGTTTATGA GATAGCACAT TATTAAATAT TTTTGCAGCT 540
 AAAAAGATAG GTAACGCAAT AAAAATAGCA TTTAAAAATG ACATGCTAAA TCCTAAAATC 600
 50 ATTCTTGCTT TATATGGTCT TATCCAGTTT AAAATTTTAA ATGTAATTTG AAACATATTT 660
 GACCTCCTTT TCTCATTAGT TTAATTATGT CCAGTATTGA TTCCCCAATC TTTTGTATGC 720
 ATGTGCGTAT CCCACATTTT CTTATAATTA CCGTTTAATT TTAGCAATAA GTGATGTGAC 780

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(2) INFORMATION FOR SEQ ID NO: 828:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 898 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 828:

TCCnAAAGAA GAAATAaCAT TATCATaAAA TCCATTGAAT ATAAATTCAG TCATCCCCTC 60
 TGAACtCTC CATAAATATA ATGGTGAATA AGTATTTGTA ATGCAATTAG TAGTTGTTTG 120
 ACTTATTAAA TAAGCTTTTA TAATTAAATT TTTAAATCCA TCAGTCTTAT AACCATTTAA 180
 TCGAACTCTA TCTCTAATTA TTTCCATATT GTAATCACTA GGCAACTTAA CATGATATTG 240
 CATTGCATGC ATTTAGCATA CCCCCTTTTA TAAAAAGGAT AGCAATAATA AGTAAATCT 300
 CATATTATCC AATTGTGATA TAGTTATCAT AAAAAGTGAT AGGTGATTAA ATTGAACTTT 360
 AATGATTTGG AAATTTTTAT AACTGTATGT GAAGAAGCAT CTATCAATAA AGCTGCAATT 420
 AAACCTAGAT ATGCACAATC TAATATATCT CAAAGAATTA GCAAGCTTGA AAATGAATTA 480
 GGTGTAGTTT TGCTTTTTAG AAATCAAAAA GGTGCTAAGG CAACTAAAGC AGGCGAAGAA 540
 TTCTTAGCGT ATAGCAAAAA AGTATTAAGA GATACAGAGA CTATAAAAAA TAAATGAAA 600
 AATAATACTA TGTCTATTTT ATGCTCAGAA CTGTTATTTA ATTATTTATC TGAGAGCGAA 660
 GAAATTATGA TGTCGAATAA CTCAATTAAT TTTATTTCTA GTGGAAATAT TAGAAAAGCT 720
 ATAGAAAAAA ATAATTATGA TAAGGTTATT TCATTCATAA AAaTTAACGA CTCAAATTAT 780
 AGACTTAGTA ATGTTGATAC TATGaaAGTA ACGCTTTACA GTAATGGAAG TAATTATGAT 840
 AAAGAGGCTT TACTAATAAA TAAAGATGAG TTTGGTCCTT TAAGGnAAAT AACTTTAG 898

(2) INFORMATION FOR SEQ ID NO: 829:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 798 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 829:

AGTAGGAGTC ATAAAATCGn ATTTCAAAAG CAATTAATGC AAAATACTGA GTCTACAGTG 60
 CTATTTGCGA AAGCGTCcAT ACGAAgTTGA GcAATGCTAA TAATAATGGT CTATCAAAAA 120

	AATATGTTGA TAGTTACACT GATTCTCTTA CTGGAGTAAC AACTTCTGCT TTTTAAATA	240
	AAGATACAGG CAAAGTAACT CTCGGGATGA CTGGGACTAA TTTACAAGAC GAAGCCTTTA	300
5	AAAAGTTAAA AGAAGGTGAA TTTTCAAGAC AAAATGTTAC CAATGCTTTG GAAACAGTTA	360
	AAGATGGATA TGCAGATCTT AAAATATTAT ATTCTCCTGC ATCTGATCAA AACTATAGAT	420
	ATGCGAATAC ACAAGAATTT ATAAATAAAA TAAAAAGTAA GTATGACATT GATTTTATTA	480
10	CTGGACATTC ACTAGGTGGA AGAGATGCGG TAGTTCTAGG AATGAGTAAT GGTATTCCGA	540
	ACATTGTGGT TTATAATCCA GCTCCTATTT CTATAACTAG TTTGAATCCT AATTCCCCAG	600
	ATGGAAAACG TTTATTAGAA TTATATAAAA ATTATAAAGG TAATATTACT AGGTTTGTG	660
15	CAGAAAATGA TGCATTGACA GAAAATCTGA AGAAATATAA GCATTATGTT TTTTTCGGTA	720
	ATGATAAAGT CTTTAAAAAT GGTAAAGGTC ATGAAATGKA AGGCTTCTG ACCGAAGAAG	780
20	AACAAAAAGC tATAAAAn	798

(2) INFORMATION FOR SEQ ID NO: 830:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 830:

	AATATCAATC TCTTCATAAG CTGAATTATT TTCATGCACT TCTTGATGTG ATGATTGTG	60
35	ACGAACnGCT ACAACTAACA TTTTATCGTC TAAATAAGT TGTTTATATT TTTCTAATTC	120
	ATCAGGCGCT AAGTTGTAGC GTGATAAAAC TGCATGTTCA CCATCTTCTC CTGTAAACAG	180
	TTTAGTCATT CTATCACTAA ATGTTCCACT TGTTGAGATA AGGGGAGATT TCAGAGTCGT	240
40	GTAAGTCATT AGGTGTAATT TACTTTTACT AATAATTGTT AGCCTGATCT AAATAACTTC	300
	AGATTCTTTG ATTGATAnGT GnATAATCGC AGTGCATTAC ACAGAATACT GCCAAGTGCG	360
45	CCCTTAAAAT TGTTATTAnC TTACCTCTAT ATAAGAACCC	400

(2) INFORMATION FOR SEQ ID NO: 831:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 475 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

	AAGTCTGCAT GACTTTTATT TGCAAGTTCG ACTGCTTGAT CAAAAGCGCG ATGATCTTCA	60
	GGATTAGCAC TTTGAACTGA GCTGAAATTC GGATCAGGTT TACATTGTGC TTCTACAAGA	120
5	TTAAATTGAT TGAAATTCAA AGATTGTAAT AACTCAGGTA CAATCGGAAC ACTTGTACCA	180
	TGCAAACTAG TGAACACAAC TTGTAAATCA GATTTAGGAA TATAGCCAAT CATATTTTGA	240
	ATGTGTTTCA TATAGTCATC AGTTACAGAT TTCGGAAAAAG GCTTGaTATA AGATGTATTT	300
10	TGTTTAGAAA tAGGTATATC AATCTGTAAT GGATCGCCAA CTTCTTCGAT ATAACGACTT	360
	GCAAGCTCAG ATGCATCAGT CGATAATTGC GCACCATCAG AACCATATAC TTTGATGCCG	420
15	TTATAGTCTT TCGGATTATG ACTTGCTGTA ATCATAATGC CAGCAGTAGT ATTAA	475

(2) INFORMATION FOR SEQ ID NO: 832:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 724 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 832:

	CTTGAATTGA AGGATACGCA AATGATGCAT AATCAGCTTC TGTATAAAGC TGTAATGTAA	60
	TGTCATCAAG GTCACCTTTT CTAACAAGCA CCTTATTAAT AGAAGTATGA TTCGCTTGCC	120
30	AAGTACCTTG ATTATTTTGT TCTAAATGAA TGACTTCGCC TAACGATTTT AACGTAATAT	180
	CTGCACGCTC GTCCTTCGCTA ATAGTATATG TCTTACCATC TCGCAAATTG AGCATCTTCA	240
35	ATTGTTTGTT ATATTTTATA ATCAATTTAT GCATTGTCTT TGCCTCAGTC CTATACTATT	300
	TTTTTCTTTC AGCTTCTTGG CGTTTTTCTT TATCTTTTTG TGCTTGTTCT TTTTGTTTCT	360
	TTTCGTTCTC TTCTTGTTGC TTAAATTTCT CATCTTTCGC TTTTGCTTTC TCTTCTTCAG	420
40	ATTCGCTTTT TTCATCTTTA ACTTGTTTTT CTTTGTCTAA AATATCTTGC AATTTATCGT	480
	TATACTTTTT CGTTTCTTCA GAACGTTTAT CATTCGATAA ATCTCCGTTA TTTTAAATCT	540
45	CATTTAATTT ATTAATCAAC GCTAACTTTG TAATATCGTT ATCATCTAAA TAAGTGGCAA	600
	TATTAATCGC TTCATCAAGA TGTCCTTGTC CTAATTCCAT CCAATATAAT AAGTAGTCTT	660
	TGTTTGAATT TGGTGTCA CA TTATTAAGTA AATTTTCTTT CGTATCTGTn TCTAAACnT	720
50	GTTn	724

(2) INFORMATION FOR SEQ ID NO: 833:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 994 base pairs

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 833:

	AGCAGTTTGG CTCGTAGAAA TCTCCCGTCT CTATTCTATG TATTAACTTT TATTATATTT	60
10	GTTATGATAC TATCGATATG AAAGCGTTGT CAATGGTTTT TGTA AAAAATT TTGTCAAATT	120
	TAATTTTTC AAGTCTTTATA AAAGTAGTTT AATTTGAAAA CTAGAAATAC CAATCCTAAC	180
	TAATTTATTT ATGACGCTCT TTTGTTTAAT TGACATTCTT CAGCCATATT TTTTATGACT	240
15	AGTTGCATTT TTTACTAATA AACACCTCTA AAACTTTAAT GATTTTAATC GTTTTAGAGG	300
	TGCTAATTAT TTTATTTGAT TATTTTTTGT TTGATACCTA CTGCATATCC CATATGAAAA	360
	CGGCTTTTTT ATTATGTTAT ATGACTAAAT CTCGTGAAAA ATGAAATTTT TGCAGACTTA	420
20	TGATTTACCA AAGTTTATCA TAACTAGTAG TTACATATTT CGCTCCATTT TTAACAGCTT	480
	CATTGACTTC ATCTATTGTA TTAATTAGGC CACCTGCAAT GACTTGTTGTG TTTGTTTCTT	540
25	TCTGAATATG ATGAATCGCT TTAAGTCAAA CACCTGGAAG TACTTCAACA AAATCAGGTT	600
	CAACTTTTTT TATCAAATCT ATACTGCGTT TCAATGCTTG ACTATCAATA ATAAATACTC	660
	TAAAAATCGT TAAAGTATTT AATGATTTAG CTTTTTTTAT TACTTTAGAT TTAGTCGATA	720
30	CGATACCTTT TGGCTTGTAT TGCTGAATAA TAAATTCAT TGCAAATTCA TCGTGGCTTA	780
	AACCTTTTAT CAAATCTATA TGAATAAAAC ACTCTATATG ATTTTGCTTC AGCAATTCCA	840
	TAATACTTTT TATATGTCCT ATATGCATAT CTAGAAGCAC ACACATTTTA TAGTCTGTnT	900
35	TAATCCAGTT TCTCTAAATC nTTAATGTTT CCTATAAGCA GGCAATATGT TGTTAATTCA	960
	CTnGATCCAT CCTCTCTACA TCACACGCTT AAAT	994

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(2) INFORMATION FOR SEQ ID NO: 834:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 783 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 834:

50	TCnACAAAGT CGGTATTAGG CTATGGGCCA TTTnACTATT ATA ACTAATC GGAAATATAC	60
	CACATAACAT CATTATTGAG TTGATTCTAT CATTTGGCTT ATTAGGGTTT TTTATCATAA	120
55	TGATTTGCAT TTTGCTACTA GTTTATAAAA TGATTAGGAA CTATGATCCA AACACTATAG	180

ATTTAGTTGT AAGTGAATTT TGGTTTGTGT TGTTCTATTT TATTACAAAA GGACGGCGTC 300
 ATCATGGCTA AGAAAGTTTT TATTATGGAT AGCGTAAAGA CAATAATTGG TACGTTGCCT 360
 5 ATAGCTTTAG GATTACAATT TTTAGCTTAT CCAATTATTA ATCAACGAGT AGGTAATGAA 420
 GCGTTCGGTT CTATTTTAAC GATTTATACA ATAATAACAA TCACGAGTGT TGTATTAGGC 480
 AATACGCTTA ACAATATACG mTTGATTAAT ATGAATCTAT ACAAATCCAA TCATTACTAC 540
 10 TGGAAATTTG CATCGATACT TTTAATCTCA ATTCTGATTG AGAGTATAGC TTTAATTATT 600
 GTATTTCTTT ACTTTTTTAA TTTGAACATC ATCGATATTA TCTTTTTAAT TCTACTTAAT 660
 ATTTTAATGT GTTTAAGGAT TTATCTGAAT GTATTTTTTA GGATGACTTT AAAATATAAT 720
 15 CAGATTTTGT ATATTGCTCT TATTCAATTT TTAGGTTTGC TGATAGGACT ATTTCTATAT 780
 nAT 783

(2) INFORMATION FOR SEQ ID NO: 835:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 794 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 835:

TTACCTAATT TTTCAAtCaT AAGATTCCCC CTATTGTTTA AACaTAAAAA TATTATaCGA 60
 TTAAGCACGA GmCACTTCAA TATATTTTTT AGAATATTCT TATAAATATT AATATGATCA 120
 35 TTTCAC TATT TAAACACGTT TAATATTAAA ATAAGTTATT CATATAAACT GGTGCTGTTT 180
 GATCCAATTG CAGACTTACG AGTCATTGAA AAGTCTCACA AACTATTGmA AGTAAAtATC 240
 TTAAATAGA AAGTGAATGG TTAATTTAAG TATATTTmAA AAATATTAAAC CTTTTTAAGC 300
 40 ACTGCTATTT AGGATATACT AAATAATAAC TAAGTTTAGA AAAATAGGAG GAACATCGTT 360
 TATGTAAAC AAGGTTTGGT TCCGAAC TGG CATCGCTCTG ATTATGCTGT TCATTCTCAT 420
 CAAACTATTT ATGGAAGTGC ACGAAGTATT TACTCCAATA GCTACAATCA TCGGTTCTGT 480
 45 ATTTCTTCCA TTTTAAATTA GTGGTTTTTT ATTTTATATC TGTCTACCTT TTCAAAACTT 540
 ACTTGAAAAA GTCGGTTTTT CAAGATGGGC TAGTATAACA ACAATCATGT TAGCTTTGTT 600
 TGCTATTATC GGCTTAATTG TTGCGTTTGT TGCACCAATC ATCATTTCaA ATATCAACAA 660
 50 TTTAATTAGT CAGACACCTG gCCCTACAAA AAGGAAGCAG AGCAAATTAT TAAATTCGCA 720
 CTGGCTCAAA TGGnTAAATT ACCTGGAGGA TGTAACCAmG TGGATTACCA ATATGGTAAA 780

(2) INFORMATION FOR SEQ ID NO: 836:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 836:

TGTTTATACT GTGCCTGAAT TAGAAGAGGT TTAAACACCT ATGAGACAAG ATGGAACCTCG 60
 TGATATTTAT GTTAATTTAG AAAATGTGAG TtATATGGAT TCGACAGGTT TAGGTTTATT 120
 CGTAGGTACA TTAAGAGCAT TAAACCAAAA TGATAAAGAA CTATACATTT TAGGTGTGTC 180
 AGATCGTATC GGTAGACTAT TTGAAATTAC TGGTCTTAAG GATTTAATGC ATGTTAATGA 240
 AGGAACGGAG GTCGAATAAC ATGCAATCTA AAGAAGATTT TATCGAAATG CGCGTGCCaG 300
 CATCGGCAGA GTATGTAAGT TtAATTCsTT TAACACTTTC tGGCGTTTTT TCGAGACTGG 360
 TGCCACATAT GATGATATTG AAGATGCCAA GATTGCAGnT 400

(2) INFORMATION FOR SEQ ID NO: 837:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 433 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 837:

ATTGATCCAT TTTGCGGTTT GGGTACAATA GCTATAGAAG CTTGTTTAAAT TGCTCAAAAT 60
 ATCGCACCTG GTTTTAAATCG CGAGTTCGTA TCAGAGCAAT GGAACATCAT GCCAGCAAAT 120
 ATTTATGATG ATTACCGTGA TGAAGCGGAT AAGATGGCTG ATTATGATAA AGAAATCGAA 180
 GTATATGCTT CTGATATCGA TCCAGAAATG GTAGAGATTG CTAAGCGTAA CGCTGAAGAA 240
 GTTGGGTTGT CTGATATTAT TAAATTTAGT GTAAAAGATG TCAATACATT AACAATTGAT 300
 ACAGAAGAAC CGGTGGCGTT AATTGGAAAT CCTCCATATG GTGAACGTAT TGGTGaTCGT 360
 GAAGAaGtG AAGAAaTGTA CCGTTATATT GGTAAACTAA TGAAACAACA TCCATTTTTTA 420
 TCTACATACA TTT 433

(2) INFORMATION FOR SEQ ID NO: 838:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 926 base pairs

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 838:

	ATTGGGCCAA CTAATCCTGT ATATCCAAAT CCAGCAGACA ATGGTGTTCC TTTAACCTGA	60
10	AGAACGTAAG CAATGATTCC AGTAATTATT CCATTTATAG TCAATGGTAT CGAAATAATT	120
	AAATTTTTC AGTAAACTGG GATCATCATT TTTGCAGCTC CTATGAGTAA AACTGCATTT	180
	ACACCAATAG AATTGACACG CAATGAGCCA AATAAGAAAG TAACACAGGC AGCCACTATA	240
15	CCTAGGTTTG CTGCTCCACT TCCTAGTCCG TTAAACTAA TCGCAGTTGC AATCGCTACT	300
	AACGATATTG GTGTTACCAT TAATAATGAA AATGCCACAC TAATAAGTAT AGACATTAAC	360
	AACGGATTTA AGTCTGTAAA AGAATGAATT ACATTTCCAA TTGCTTGAGT AATTTTTCGA	420
20	ATGTAAGGTA ATGTGATTAG ACCGATACCC CCACTAACGA TAGGTACTAA AACTGGTAAT	480
	ATAATTAATT CAAAAGATCC AAGTTTGTTT TGTAATACCA TATATATAAG ACATGCAATA	540
25	ATAACAACCA AACTCGTATT TATAATGtCa CCTATACCTT TTAACATAAA ACTATTATTG	600
	CTATATACAA CAGCACCTGA ACCAATCATA GCTGATGTAC CTA CTATATAGC AGCACCTGCA	660
	CCATTAAATT TAAATTGATG AGCAGCTAAA ACCCCAATAA TAAATGCCAT AAATGATTGA	720
30	ATTAGTATCA CTAAGTATA CGTTAATTCT AAAATTTTCAT TACCACTTTT AAATATTTTt	780
	AATACTTCAC CTAATAAAGC ATTCGGAACA AGTGCAATAA CAACACCAGC ACCAATAGAA	840
	TTTAAAATCT TACTGAAAAA CTGTTTATTA TCAGCATTAT TTGCGTTACT CATAAACGAC	900
35	CTCCAATTTG AACATTAnAC TCATCA	926

(2) INFORMATION FOR SEQ ID NO: 839:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 400 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 839:

	CTTCGAAACG TACTTGGTCA TTCCCTTTAC CAGTACAACC ATGTGCAATA CCTACTGAAT	60
50	TTGTTTTCTC AGCAATCTCT ACTAATTTTT TAGCGATTAA TGGTCTTGAT AAAGCTGAAA	120
	CTAATGGATA TGCATTTTCA TACATTAAAT TTCCTTTGAT TGCATAACTT ACATACTCAT	180
	CACTAAATTC TTTTGTTGCA TCAATAATAT GACATTCAAC TGCTCCCAT TCTAAAGCTT	240

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CGTATCctTT GTCGATAAGC CATTGAACGG CCACACTTGT aTCTAGtCct CckGAATATG 360
 CTAACAAT TTTCTCTTC ATAAATTCA CCTCATTGTA 400

(2) INFORMATION FOR SEQ ID NO: 840:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1043 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 840:

GGATCGCGGT GTTGTGCTTG ATATACTTTG TAGCGATAAC GTTTACCTAC ACAATCATAA 60
 CGACAATGAA AATCGTCATC GACTGTAACT ACATTGTTGA CATAAATATC ATCAGGTAAC 120
 GTTCGGTTCA TTGCATATTG CCATTGTGAC ATAGGTATAT TCAGCTCTGT GTCGAAATGA 180
 AAGTATTGCT GTATCGCATG TACACCTCTA TCAGTCCTAC TTGAAGGATG GATTCTCACA 240
 TGTCTTTTAT GCATGCGTTG TAATAGCTTT TCAAATTGTT GCTGTACCGT TCGACCATT 300
 TGTGAATTT GAAAACCTAG AAAATTATTT CCTTGATACG CAATTTCTAC TAATATACGC 360
 ATGAATTTAC ACTCCTGAAT ATTTTAATAC GAATAAAATA ATTGCAATTG GGATAATCAT 420
 GGTAAAGAT ATCGTATCTC TCAATTGCCA TTAAAGCTGT CTGTAGCTCG TTCTCTTAAC 480
 ATTGGCATCA TAACCCCTAA CTTCATTGC GACCGCTAAT TCTTCGGCGC GTTGGAAGC 540
 TGAGATGAAT AGTGGCACTA GTAATGGAAT AAATGATTTA ATACGTGTTG CAATGTTCCC 600
 TGAACCTTATT TCAGAACCAC GCGACTTTTG CGCCAAAATG ATTTTATCTA ACTCATCCAT 660
 TAACGTCGGG ATGAATCGTA ACGCAATGGA CATTATCATA CTTAATTGAT GAACTGGTAA 720
 TTAAACATC tTTAGTGGTG CAAGTAATCT TTCAAACGCA TCTGTAAAT CAATTGGACT 780
 TGTAGATaGT GTCaTAATTG TTGCAATCAT TAcAATCCCA ATTAAACGCA GTGrTATATA 840
 TAGCCCTTCT AAAATACCAT TAGTTTCAAT CGTGATGCCA TGCCATTCAA CTAATACATA 900
 TCCACCTTTA GTTAAAAATA TATGCATCAT TAATGTGAAG ATTAAAAAGA AAAATATTGG 960
 TGTTAAACCT TTGATTAGGA ACCATAATTG AATTTTGCT AATCTCATAA TGAAnAnGAT 1020
 AAGTGCAAAC ACCCAAAGAT ATG 1043

(2) INFORMATION FOR SEQ ID NO: 841:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 343 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 841:

5 TCGAAATCAA ATTATAATAG ACAATTTTAG GAGGTGGACT TTCGATGACC AAAGGAATCT 60
 TAGGAAGAAA AATTGGGATG ACACAAGTAT TCGGAGAAAA CGGTGAATTA ATCCCTGTAA 120
 CAGTAGTAGA AGCTAAAGAA AATGTTGTAT TACAAAAGAA AACTGTAGAA GTTGATGGAT 180
 10 ACAACGCAAT CCAAGTTGGA TTTGAAGACA AAAAAGCATA CAAAAAAGAT GCAAAATCTA 240
 ATAAATATGC TAATAAACCA GCTGAAGGTC ACGCTAAAAA AGCTGACGCn GCACTGAGAG 300
 15 nTCCCCTCAT AATTTCCCCA AnCGTAACCA TGTGTGAATA AAT 343

(2) INFORMATION FOR SEQ ID NO: 842:

(i) SEQUENCE CHARACTERISTICS:

20 (A) LENGTH: 430 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 842:

25 ATGAGTATTT TAATGATGCG CTACGAGCGT ATGGTCTTAC TGTGAnAACA GGTGAATTTG 60
 GAACACACAT GAATGTTAGC ATAAATAATG wtGGwCagTC TCTGGTAGTT TAGAATTAGA 120
 30 AGAATTAAAG CAATTTAGAC AATGGGGTTC TAAAACACCA GGTCACTCCTG AATACAGACA 180
 TACAGATGGT GTAGAAGTTA CTACCGGACC ACTTGACAA GGTTTTGCTA TGTCmGTAGG 240
 ATmGCTTTA GCAGrAGATC ACCTAGCAGG GAAATTTAAT AAAGAAGGAT ATAATGTTGT 300
 35 AGATCATTAC ACATATGTAT TAGCTTCTGA CGGTGATTTA ATGGAAGGTA TATCGCATGA 360
 AGCAGCTTCA TTTGCTGGAC ATAATAAATT AAGTAAATTA GTTGTTTTAT ACGATTCAAA 420
 40 TGGATATTTT 430

(2) INFORMATION FOR SEQ ID NO: 843:

(i) SEQUENCE CHARACTERISTICS:

45 (A) LENGTH: 329 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 843:

50 GGACTGCCCCG ATGATTTGAC AAATGAATTG CTGATTTGAT TTATATATTA TCTGnAATTA 60

55

TCATCTATCC AACAAATATGT CTTATCAATG GTATAGTCTT TGCACACCAA TGGAGGnAAA 180
TAAATCTCAA CCTTACTATA TTAATATATA ATCAAATCTT AGATTAACTA GTGTAATGAT 240
5 ACAGATGGAT AATTGAGTAC AAATTTAAAA CCCTGAGATT TTCGCTTTAA TTTGAAAACC 300
TCAGGGnTTA TTTGATTTTT ATATAATGA 329

(2) INFORMATION FOR SEQ ID NO: 844:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 844:

20 AGATGAAGAA AGTGTTCAT CGATTATCTT AACAGTTGTT GCTTTATATA CTACAnTTCT 60
TCCTAGATCT TGTACCGTTG AAAAGAGACC TGGTTGTAAA ATCTTAATTG ACATTTTCAA 120
TCACCACCCA GTCATCAACA TTAAAGTTGC CATCTGATAT ATCTCTTTCG ATTTGTATAA 180
25 ATTTCTGTTC ATCTATTGCA TAAAAATTGTA TCCATTCTCC TGCTTCGTAC ATTGACATTG 240
GTTACGCTC GCTGCTAAAT ACTTTTAACG GTGTGCGTCC AATAATTTGC CATCCGCCAG 300
GGAAATCTGA TGGGATATAG TCCTGTTTGA TTATTCGCAA TACCTACAGA ACCTGGCATG 360
30 AATTTTTTAA CCTTGGGCnG ATTACGTCTA nGGnGTATGT 400

(2) INFORMATION FOR SEQ ID NO: 845:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 535 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
35 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 845:

CATAAGTCCA GTAACCTTCA ACTGTGTCCT CATCTTTAGT TCCAAATATA TCAACGTATT 60
45 TATTTCTTAA CTGATTAATG TTTCCCCAAC TCTCGGATCC AAACACTTGA ATATGACTAT 120
ACCAAACCCA CGTTTGCAAT GTTGCATGAA TGCTACCATT GGGCTTTTGC CATAACCATT 180
TTCCAGATAA TGAAAAATGC GGCTGAGTGT AATATTTGAT TAGTTCATTG ATATTAGTCT 240
50 CGTTTTCACT GATATTATAG GCTTTTGCTT CAGATGAAAA ACTGATTGGT GTTTTAGGAA 300
GTTGTGTTGA TGAGTTTCT AAAAGTAACA ATGCTGTTGA TAAACTAAT TTATTCATGA 360

ACCGATTTCGG AATTAAATAA AAGCTAAAAC TATGTTAAAT AAACCTTAAAC AGTTAGTAGT 480
 GTTATTTAAG CAAAACCTTAT CATTTTTTAAG TTGGACAGAA CAGATCAATA AGAGC 535

(2) INFORMATION FOR SEQ ID NO: 846:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 509 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 846:

TCAATCGATC AAATGGTGAT TGACCTTTTA AATTGTATG ATCAAAATAA TGATTGTTGG 60
 CCATATCTTT ACTATGCTTA CGTGCAGTTT CAGAATTCTG TTTAGAATAC TTCAATGTAG 120
 ATAATTGATG TTGTTTTCTT TCAGCATTAA CTAAATCAAA ATTTTGTAGT TCAAAACTAT 180
 CTGCAAGCGA TTTCGATGGT GCTCCATATT GTTCTTTTAA TCTATTTTCC ATAGCATCAC 240
 TTAATTGTAA AACAGCTGTT ACATTATTAC GTCGATGCTT ATCATAAAAT ACCGTCGTAT 300
 AAATGTGATT TTTATGGAAA ACATCATATT CTTTATTATT TTGTTGTAAC CGCACTCTAC 360
 CTTTAACAAT CTCTGTTTCT GGTTCGCCTA ATCTTTCCTT TACAACCGAT TTAGGTGTAT 420
 TGTATTTAAT TTTTGATTTT GAAGTGATTA TATTTTGATT TGTATATAAC GCATTAACCT 480
 TATCTTTCAT GTAACCTATC ATTATAAAA 509

(2) INFORMATION FOR SEQ ID NO: 847:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 847:

CGTATTGATC TATAAATAGT GTTTAGATGC TATAGTCGGA TGCTTAAGTA ATTTAAAGAA 60
 AGTATCTTTA ACATCGATGT GTGTATAATC ATTTTITAGAA GTATTATAAT CTTTTTCTTC 120
 TCCCTTCTAA AATATATACA GGTGCTTCAT CAGCTAGTGG TTCAACTGGA ATGTCAGCAT 180
 AAACCTCGCA TCATATGTTA AACAAAAACG ATTGTATCTG TACTTCACCT ATAACAGCAC 240
 TATCCAATTC GTGCTTATCA AATAAACTAA GATTTTTGTC AGTACCTTTT CACAACTAGT 300
 ACATACGTCT TGAGTTCTGA AGCATCATTT CATAAGGAGA ATACTGGCCA CGTGTGGACT 360

(2) INFORMATION FOR SEQ ID NO: 848:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 848:

TACCACTTGA ATACATTGCA TATAAAATAC GACGTTGTAC TGGTTTAA CCATCAGGAA 60
 CATCTGGCAA TGCACGCTCT TGAATAATAT ATTTACTATA TCTTCCAAAG CGATCACCTA 120
 AAACATCTTC AAGTGATAAA TCTTGAATTA TTCACTCAC TAGATTCCT CCTCATCAAA 180
 TTGATCATTT TCAAGCACTT GTACTTCAGA ATTATCTAAA ATACTTTGGT CCTCTTGCAT 240
 ACCAAACTCA ACATGCTTTT CAATCCATTC ACGTCTAGGT TGTACTTTGT GCACCCATTG 300
 AATGTTGTTA CACGTTTAGA TGGAACGCAC TTGCATCTTG CAACTTGTGA CACGnATTGA 360
 AAGTTnCGTG TTTGCGGGG TnAGCGTC GTTTGCCCAT 400

(2) INFORMATION FOR SEQ ID NO: 849:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 849:

TTTATATGAT TTATTTGAGG AGTTAAGAGA TTTATTTAAA GAAGAAGATT TAGAACCATG 60
 GACATCATGC GAATTTGATT TTACAAGAGA AGGTGAATTA AAAGTTTCAT TTGATTATAT 120
 TGATTGGATA AATTCAGAAT TTGGTCAAAT AGGTGACAA AATTACTATA AGTATAGAAA 180
 ATTTGGAATT TTACCAGAAA CGGAATATGA AATTAATAAA GTTAAAGAAA TCGAGCAATA 240
 TATTAAAGAG CTAGAAGAAT AACTATCTT AATGTAAGAC TAAACAATAA AGCTTTGTTT 300
 AGTCTTTTTTA GCGTTTAAGT AAAAAGCaAT AGATACCGTA AAGTTGATGC TCATCAAATA 360
 ATAATATAaA GATAATTTTA GTTTTTAA CTTTTAATCG 400

(2) INFORMATION FOR SEQ ID NO: 850:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 923 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 850:

5 CAGGCCATAC TTACAATTTT GGCCATCGTC CGGATGTATT nGGAATCGTT GGATAATAAG 60
 CATCAAGGTC GTGACTATTT CGTAAAATTC CAACTGTCCC AGAATTTACA TCATTATGTC 120
 CAATTACTGG GCAACCaGAT TTTGCCAACT ATCTATATtT CaTATATTCC aAATGTTAAA 180
 10 ATGGTTGAAT CAAAATCTTT GAAATTATAC TTATTTAGTT TCAGAAATCa CGGTGATTTT 240
 CACGAAGATT GTATGAATAT TATTATGAAT GATTTGATAG AGCTTATGGA CCCACATTAT 300
 ATTGAAGTCT GGGGCAAGTT CACACACGTG GTGGAATTC TATTGATCCT TATACAAACT 360
 15 ATGGACGTCC AAATTCTAAA TATGAAAAA TGGCTGAGCA TCGTTTGATG AATCATGATT 420
 TATATCCCGA AAAAATAGAT AATCGTTAAA TGTATCATTT AATAAACACA CCAATAAGTT 480
 20 GATTTTCCTA ACTTATTGGT GTGTTTTTCA TTTAGCATAC ATAATAGGTT ACATTAAAAT 540
 AACATTTTAT ACCAAAGTAC ACCAAAAGAA TATTAGTACA CGAATTAAAC AACATTTTTIA 600
 TAGAAACCTA TTGCACTTTA ACGTCAATAA GTATATTTTT ATATTATCTC TAATTAATTG 660
 25 TGCGCGCTTA ATAACAGAAT ATTCTCAATA TTTTATTTTT TTTGTGATTT GTTGAATAT 720
 TTAGTTGATA AGGCACAATC AAATTTACTT AAATATTGT ATTAGGGGAA GAAAGGATGG 780
 GATGTATACA TGACACAACA AAATCCCAT GGAAATCAA TTCAAGACAT ACCTCAAACA 840
 30 GGATTTTTTCG GGcATCCTCG AGGACTAGGC GTACTCTTCT TTGTAGAGTT CTGGGrAAGG 900
 KTTAGTTATT ATGGGCATGC GTG 923

(2) INFORMATION FOR SEQ ID NO: 851:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1004 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 851:

45 TTAnTTGCAT CTATTTcAGT TGGTGTAAG AAAGCGGAAT TTGATTTTAT TGAAAAGTTA 60
 GcTCAAGAAA AATTAATCCC CgAATATATT ACAATAGATA TTGCGCATGG TcACTcAGAT 120
 TCaGTGATAA ACATGATTAA ACATATAAAA ACCCATATAC CTGATAGTTT TGTTATTGCT 180
 50 GGTAATGTTG GTACGCCAGA AGGTGTTAGA GAATTAGAAA ATGCTGGTGC TGATGCTACC 240
 AAAGTCGGTA TAGGTCTTGG TAGAGTTTGT ATTACAAAGA TTAACAGG TTTTGGTACT 300

55

5 GCGGATGGTG GTATAAGAAC GCATGGCGAC ATTGCTAAAT CAATTAGATT TGGTGCAATCA 420
 ATGGTCATGA TTGGTTCATt WTTTGCGGCA CACGAAGAAT CACCTGGTGA AACTGTAGAA 480
 10 CTTGATGGTA AACAGTATAA AGAATATTTT GGTAGTGCAT CTGAATTTCA AAAAGGCGAA 540
 CATAAAAATG TAGAAGGTAA AAAAATGTTT GTAGAACATA AGGGTTCATT AATGGATACC 600
 TTAAGAGAAA TGCAACAAGA TTTACAAAGC TCAATTTTCAT ATGCCGGTGG AAAAGACTTG 660
 15 AAATCATTAC GTACTGTAGA TTATGTTATT GTTAGAAACT CTATTTTCAA CGGTGATAGA 720
 GATTAATATT TATAGTAGGT GAKGTAAATT AAAAAATTCA TAGTAACTGT TGTTCGCTTT 780
 TTATCAATTA TTATCATTGC GCCAnTAACA GAATTTAAAC CATTCAATCA TTTACAAAAT 840
 GAAGTAAGAC AATATATTGA CATTACATC AATAAGAAA CAATTTCTGC GGAAAATAAA 900
 TTGGATACAC CGAAGAAACA ACAATTTGCC TTTAATAATA TACAAATGAA CATGTCGAAA 960
 20 TCAGATGTTG AGAAAACATT AAATAAACCA AAAAGAGTGA CATn 1004

(2) INFORMATION FOR SEQ ID NO: 852:

(i) SEQUENCE CHARACTERISTICS:

- 25 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 852:

30 GTTCGCTCCA ATGTACGAG TTGTATATGC ATAGACACCA AAATCGAACC ATTCCATTGC 60
 35 ATTACCGATA CCGGTTGCAA CAACGGTTTT TTTAGCTTTC TTTGCATCCA CCATGTTAAT 120
 ATTCTCTTTA TAAAAATCCA TGAATTCATA CACTCCCTCT TGTATGTTTC ATAATTATAC 180
 GGAGTTAATT AGTTTTGTCA AATTTATAAG AATTTAAACT TTTATATAAA TACCAAAGTA 240
 40 TGTTTGTTC AAAAAATTCGC TTTATCGnAT TAAATTCATG GTTTTATACC TCATACATTG 300
 ATTAGACATA ATAATCTAAA CACGACGTTA CTTTGGATAT ACTnAATGGT nnCACACTCA 360
 GTAGGAAGCA CGCATTGCT CGATAATGTA ACCATACTCA 400

(2) INFORMATION FOR SEQ ID NO: 853:

(i) SEQUENCE CHARACTERISTICS:

- 50 (A) LENGTH: 361 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

GGTGAAATTG TAACTATATA ATCGATATTA CCTTCAGTGT TCAAAACTGG AAAATAATAA 60
 TTACCATCAC TCTTTTTGTT GAATTTATAA ATTTTAAAAG GTTCACCAAG TGTATACGAG 120
 5 GCTTTCTCTT TATTATAGAT TTTATCAAGT GAAGTAACAT AAGAAAGATA GTCTTTTTGC 180
 GCTAAATTAC GTACGTCAGT AGGAaACTC TTGTCCTCGA CATTAACTTG CACATGCTTC 240
 TTATCTTTTG CTTTGATATT TGAATTGCTC TCAGCGTTTG CAATAGGGGT AACACTTAAA 300
 10 GaaAATATTA AACTTAAAGC TATTAATTTT GGAAAGTTTC TTTTCATATA AAAACTCCTT 360
 T 361

(2) INFORMATION FOR SEQ ID NO: 854:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 605 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 20 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 854:

25 ACnTTATACT AGAnAAAGnT ATTAAAGTAT ATCTGCTTTA CACCATTAAA AAGCGGCAAA 60
 TGCTATAGAT AATCTAAAGC ATCTGCCGTA TGAGnATTa TTTATTTTTG ATTGTCATAA 120
 TCGTGTGGTT TTAAATTAAT TGTCTCTAGC TTTACAAATT TTGTTTTGTG AATGATTTTA 180
 30 TGAATAAAGT AAATCAACGC TAGAATGATT AAAGGTAAAA AGTTTTTAAA AGCATTTAAC 240
 CATTGATCTT TTAAAATATA TTCAACTGAG CCACCAAATA GCAAGAATAA TAGTGTAGTG 300
 ATGACAATGA TTGGTCCTAA TGGATAAAAA GGTGCTTTAT ATGGTAGGAC CTTATTAGGG 360
 35 TCTTGACCTT GTTTTTTAAT AGCTTGTCGC AATCGTATTT GTGACCAAAT GCTTGATCCC 420
 CAAACAATA TAATCATTGA ACCAATAATT TCAAGTAAAT TAAAAACGGC ATTTGAATTA 480
 40 AAGTTTGCAT AAATAATAAC AATAACAACG ACTGCATAAG TAGTTAATAA TGCTCTTAAA 540
 GGTAACCTAG TTGTCTTGTT TAATTTACTT AAAAATTGGG GTGCTTTTTT GTCTGAACTT 600
 AAGGA 605

(2) INFORMATION FOR SEQ ID NO: 855:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 515 base pairs
 (B) TYPE: nucleic acid
 50 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

	TTGAACAAGC	ATTTTTTAAAT	AGTCAACAAC	ATCAmGCAAT	TAGTGAAGAG	GCACAACCTTT	60
	TAAATAATCC	AGATGAATTA	ATGGCATTIT	TAAAGAATAA	GCGTAAAAAT	ATTTTAGAAA	120
5	ATGCATACAT	TATGCCGCAT	AATATGAGAG	AAATGTTACG	AAGTTATTTG	GAAAGTATGT	180
	CTCAAGACTT	TAATGTTGGC	GGATTTTTTA	ATAAAAAGAA	GAAAAAACTA	CAAATTCAAC	240
	AACAGCGATT	ATTAACAGCG	ACAGATGCGT	TACAAGAACA	TGTTAATCAA	CAAATTCGTC	300
10	AACCAATGCG	AGAAGATATG	TCATTTGTTA	CGCGTTTTAT	CAATAAAAAA	GmAGCTTCAG	360
	aTAmAGTATT	AAATCAGCAT	TATGACGTTA	AGCCAGAAAT	GATTGAAGGT	TTATATCAAC	420
	CACAAACATC	AATCAGCAAT	ACTTATGTAC	TTACATTTTC	AGACGAAGTG	GTAAAGCCA	480
15	TTAAGAAATA	TGTTGAACAA	CAATCAACAC	CAATT			515

(2) INFORMATION FOR SEQ ID NO: 856:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1607 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 856:

	GTCAITTTTA	AAATTTGCA	TTCGCGTTTA	ATTTTTTCTC	TTTTTCTTT	TTCTTCTAGT	60
30	GACATACTTT	CTTTAGGTGT	TTCAACCAAT	TCAGATGTAT	CTACATCATC	AATTTTAGTG	120
	ATTTTGTCTA	CATCTTTCTT	TAAATCTTCT	GGGACGTTCT	CGAAACGCTT	ATATTGCTCT	180
	TTAGAGATAC	TAGCAGCTAT	TTCATTAGCT	CCTAAAATTT	CATCTATCAA	GCCGAAAGAC	240
35	AAGGCTTCTT	CTGCAGTAAG	CCAAGTTTCT	GCATCTAACA	TCTGTTTTAA	GTGTTCTTGA	300
	TCTAAATCTT	TTGCTTTATC	TAAATAAGCT	GAATTACTAA	CAGCATCTGT	TTTTTCAAGT	360
40	AAATCCGCTG	TCTTCTTAA	TTCTTCTGCA	TTACCTACAG	TCATAACCCA	TGAATTATGA	420
	ATCATTAAAA	AACTATTTTT	GTGCATAAAA	ATAGTGTCAC	CACTCATAGC	GATAACACTA	480
	GCAATTGATG	CCGCTAAGGC	ATCGACATAG	ATATTAATTT	TTGCAGGATG	CATTTTTAGC	540
45	ATATTGTATA	TTGCATGTCC	TTCAAATACA	CTGCCTCCAG	ATGAATTTAT	ATGAACATCT	600
	ATTTCACTGA	TGTCTCCTAG	TTCATCTAGT	TTATTTTTGA	AATCTGTAGC	AGTTACATCA	660
	CTTTCAAACC	ATTTATCACT	TACAATATCA	CCATAAATGa	ATATTTCAACC	TTTACTTTTT	720
50	GATTTTCTTT	TCATTTGAAA	ATACTTAGCT	TTCAATGACA	TTTTTATCAC	CACCTTTCaA	780
	AGATTTTCTT	AATTCAAGTG	GCGTGTCAAT	TGGGTATAAA	TCACCGCTTA	ATTAGCGGCT	840

AACCCTACG AACTGCTTTA AAGTACACTT CTGCTTGTGT TGCACTATCA GCCCTTAAAT 960
 AAGATTTAAC GTTAAATTTA AAATACCTAT TTTTCTCTCT GTCTGTTTGA GTAAGTAGTT 1020
 5 TCCGATTAA_n TTCTTCTTCA TACTGTTTGA CGATTGGCAA TAAGGTATGC TGCAAGTAAA 1080
 ATCTGTTTAA CTCTTCATTT TTCGCGAAAT TTGTATTTGA TCTTGCATTT AAGAATATTG 1140
 AGGGCAATTG AAAAACGTTA GCTACTCTTT CTCTTGTTAA ATTCTCGCTT GCCACTATAT 1200
 10 CTTCAGAGAC ATATTTTTTTA GGTAAAGGTT CGATTTCAAC ACCAGGCTCT TGAATAATA 1260
 TTCCACCGTT TTCTTCATAG TACTGTTTGA AATCTTCTAA CACTTGTTGC CTTTTTCTG 1320
 TACTTACATT GGAACCATAT TTAAGCATAA AAGAATCTGG TTTTGCATT TCTGTAAGAT 1380
 15 TAAAGGTTCT TACTGCATTG TCAAAATCAG TTGTATTCTT CAACACATCA ATCGGACTAA 1440
 TACCTTGAAC CATATTAGAT GCCACGATGT GTTTAAAATG CAACATGTCC aTATTATGAA 1500
 20 CAATCAATTT ATTTCCAGTT GCAGCATGAA TGAATAATA AAGTTCAC_cG TGATTGGTTT 1560
 TCAATTAACA TTTCAACAAC ATCTGGATTT AATAAGAAAA GCTTTGA 1607

(2) INFORMATION FOR SEQ ID NO: 857:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 346 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 857:

35 ATGCGCATTT AACCGCATTT AGAGATGCTG AAGATCAGTA TAAAGCTTTG TTAGAAATTA 60
 CAACATTACC AGAAGGTAGA ATTTATGTTG CTCGCCAAGA TCAACTCATT GTGGGTTATG 120
 TCACTTTCCA CTATCCTGAT GAAATTGAGC GCTGGTCTAC AGGTAAGCTT CCATATTTAA 180
 40 TCGAATTGGG GGCAATTGAA GTCAGCATCA ATTTTAGGCA ATTACAACCT GCAGAAAAGC 240
 TGATACAACT TAGCCTTCTA CACCAGAATT CGAGAATTAT ATCGG_nATAA CTACAGGATA 300
 TTACCGGCAT TGGGGGTTTA AAAAATTCCC AGT_nAGAGGT ATT_nCC 346

(2) INFORMATION FOR SEQ ID NO: 858:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 1176 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

	ATTACTATAA TGAATCTTGC GAGATATTTA GAAGTAATGA TACAAnATAA TGGACTTTAG	60
	AATTTmAATT TACAATAAAT AGTTCATGA TTAAATGTCA GTTTTATGAC ATTTATTTAT	120
5	TGAAAATACG AACGAATGaG CGATaTGATA ATATAGATAA GAATGATTTT AATTTAGGAG	180
	GCCTTTATGG TGCATAATAA AAACAATACA ATTTTAAAAA TGATCAAAGG TGAAGAAACA	240
10	TCACATACAC CTGTTTGGTT TATGCGACAA GCTGGCCGTT CGCAACCAGA ATATCGAAAA	300
	TTGAAAGAAA AATATTCAT ATTCTGATATT ACACATCAGC CGGAGTTGTG CGCTTATGTA	360
	ACACATTTAC CAGTTGATAA TTATCATACA GATGCAGCAA TTTTATACAA AGATATTATG	420
15	ACACCATTAA AGCCAATTGG TGTCGATGTA GAAATTAAAT CGGGTATTGG TCCAGTGATT	480
	CATAATCCAA TCAAAACAAT TCAAGATGTT GAGAACTTT CTCAAATAGA CCCCCGAACGA	540
	GATGTACCAT ATGTATTAGA TACAATTAAA CTTTAAACAG AAGAAAAGTT AAATGTGCCG	600
20	CTAATAGGAT TTACTGGGGC ACCATTTACA TTAGCGTCAT ATATGATTGA aGGCGGACCA	660
	TCGAAAAATT ACAATTTTAC AAAAGCGATG ATGTATAGAG ATGAAGCAAC ATGGTTTGCT	720
	TTAATGAATC ATTTAGTTGA TGTATCTGTT AAATATGTAA CAGCTCAAGT CGAAGCAGGT	780
25	GCCGAATTGA TTCAAATTTT CGATTCATGG GTAGGTGCAT TAAATGTCGA GGATTACAGA	840
	CGTTACATTA AACCACATAT GATTTCGATTA ATCAGTGAGG TTAAAGAAAA ACATGATGTG	900
30	CCGGTAATTT TATTCGGTGT AGGTGCCAGT CATTTAATCA ATGAATGGAA TGATTTACCG	960
	ATTGATGTAT TAGGCCTAGA TTGGAGAACG TCTATTAAATC AGGCTCAACA ATTAGGCGTT	1020
	ACTAAAACAT TACAAGGGAA TTTAGATCCA TCAATTTTAT TAGCACCATG GAATGTCATT	1080
35	GAAGAGAGAT TGAAACCAAT ATTAGATcAA GGTATGGAGA ACGGTAAACA CATCTTTAAT	1140
	TTAGGACACG GTGTATTCCC AGAAGTGCAC CAGAGA	1176

(2) INFORMATION FOR SEQ ID NO: 859:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 621 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 859:

50	ATTTGGTGCA TTGGTAnAAT TGACCTGAAA GnAAAAAGTG GTTTAGTTGC ACATTGAGTG	60
	nAAGTGCGCA GATGAATTAT GTTGAAAACG TGAGGAAGAG CACCTTTGCT GTTGGTGATG	120
	AAGTAGACGT AAAAGTATTA TCTATTGCTG ATGATGGAAA AATTAGTCTT TcAATTAAGA	180

AAAAAGCCGA AGATTTTGAA AAGAAATTAA GCAATTTCTT AAAAGATAGT GAAGATAAAT 300
 TAACTTCAAT CAAACGTCAA ACAGAATCTA GACGCGGTGG CAAAGGTTCA AGACGTTAAT 360
 5 TAAAATAAAT AAAGACTGTT TCGATAAGGA ATATATTTAG AATGATGCGT ATCGAATAAT 420
 CGATTGCAGC GTTAGACAAT CTAAGACTGT TTCTTAAATA AGGAGCAGTC TCTTTTATTT 480
 GTAATGATAT AACTAAGACT TATACCATT TTGAAAATTG TAAAAGTGAG GTGATGTTAT 540
 10 GCAGTTAAAT AGTAATGGTT GGCATGTTGA TGACCATATT GTTGTGCTG TTTCTACAGG 600
 TATTGATAGT ATGTGTTTTnn T 621

(2) INFORMATION FOR SEQ ID NO: 860:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 544 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 20 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 860:

25 TATATTAGGT ACTTGTTGTTG GTATTGTGCC AGCTTTGCTG TCTACTATAA TTTCTAAAAG 60
 GTTTGAACAT ATAAAAGGGA AAGTGCTAGG TGTATTTAAT TTTGTGAGAT ATATTGGAAT 120
 GACTGTCGGT GCATTATTAA TTGGTATCAT TTCTCAGCCG TTGGTAGCCT TTTACTTCAC 180
 30 AACTATAACT ATCATGTTAA TAGTAATATT TCTTTATATA AAGATAGTTG ACTTTACAGT 240
 AAAGTATGCC AAATAAACTT AAAAAAGCAG TGAATCATTT CAATAGATGG AATGATTCAC 300
 35 TGCTTTTTGT TTATAGAAAT TTAAAATTCA TGCCTTTATG CTAACAACAA TATTATTTTA 360
 CTCTCTTACG TTTGCCAATG TAACcGTATA GCAAAGTAAA TGA CTGCGAT AATGATGACA 420
 ACATACATAt ACGTGAATAG GAAGGAAGAC CAGTCATCAA CATACCAAAG CTATCGCTCA 480
 40 AAGTGCGnCT GGTAAATTAA ACCGAATTCC AnGATTGTAG GAACCCnATT AATGGAAATA 540
 ACGG 544

(2) INFORMATION FOR SEQ ID NO: 861:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 651 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 50 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 861:

AATTTAAAAT ACATTTATGC TTTACCCATT CGAAAATACC TTAATCATTT TCATTTATAG 120
 CATTGTTTGA TTGAAGGATA AAAAGTTGTT GTTTACAATA AAAATAATGA GTATCTGAAA 180
 5 TGAGGGATTTC AnTATGACAC ATGTGGAAGT AGTAGCGACT ATCGCGCCAC AATTATCTAT 240
 CGAAGAAACT TTAATTCAnA AnATTAATCA TCGTATTGAT GCAATAGACG TATTAGAATT 300
 ACGAATTGAT CAAATTGAAA ATGTCACAGT TGaTCAAGTG GCAGAAmTGA TTACAAAGCT 360
 10 GaAGGTTATG CAAGATTCAT TCAAATTATT AGTTACGTAT CGTACAAAGT TACAAGGTGG 420
 CTATGGGCAA TTTACAAATG ACTCGTATCT TAATTTAATA TCAGACTTAG CAAATATCAA 480
 TGGCATAGAT ATGATTGATA TAGAATGGCA AGCAGATATT GACATTGAAA AACATCAACG 540
 15 AATCATTACA CATTTGCAAC AGTATAATAA AGAGGTGGTT ATATCACATC ATAATtTCGA 600
 AAGTACGCCT CCATTAGATG AATTGCaATT TATATTTTTn nAAATGCAAA A 651

20 (2) INFORMATION FOR SEQ ID NO: 862:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 401 base pairs
 (B) TYPE: nucleic acid
 25 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 862:

TGTGAGTGGT AATGACACAC AAGCAGATTT AATAGGTTAT AGTTTTAAGT TTGACGGTGC 60
 GATTTCAAGG CAAGAGGCTT CTAAAGATGT ACATGCAGTT ATATTATCGA ATAAAACACT 120
 35 ATATTTATTA GATGTATTAC AAAAATTACC GATAGATAAA ATGAATTCAT TGAATATCCA 180
 TCAAGAAATT ATTGATGAAA TGTCAGATAT CATTTTAATG TTATATCGTG AATATGCAGG 240
 TATGTTTTTTT AAAAGTCAGA AACTAATCAA CCAATTAAAA AGATTGGAmC AATAACaTAA 300
 40 AATAATAAAa GGTATTCAAG TAGCCACATA GATGTGTTTA TTTGAATACC TTTTkGAATA 360
 GaaAAGaGAT ACTGGCaATT TTACTAACCA GtATCTCTTT T 401

45 (2) INFORMATION FOR SEQ ID NO: 863:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 308 base pairs
 (B) TYPE: nucleic acid
 50 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

55 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 863:

ACAAAGTAAT CAATATGTAA TATAAAATAC ACTGGTACTC AATATATAAT GATGATAAAA 120
 TTAATTTTAA TTAGATAGAG TTGCTTTGTG TTTTAAACGC nGATGCTACT ACTTATCTTA 180
 5 ACAGTTGATT AAGTAAATCA TTAAACAGCG AGATTATnCA ACCAGGGGGA TGACTTAATG 240
 AATTTATTCA GACACCAAAA TTTAGTATCA GAAATTTAAT GTCGGTATTT TTTGAGCTTT 300
 AATGCCAC 308

(2) INFORMATION FOR SEQ ID NO: 864:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1827 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 864:

TTCTACATCT TAAACGATGA CCTAACTATG ACGTTAATCT GGAAAGATGG GGAGTTGCTA 60
 GTATGATGTT GAAATTTAAA GCTTGGGATA AAGATAAAAA AGTTATGAGT ATTATTGACG 120
 25 AAATCGATTT TAATAGTGGG TACATTTTGA TTTCAACAGG TTATAAAAGT TTCAATGAAG 180
 TAAAACTATT ACAATACACA GGATTTAAAG ATGTGCACGG TGTGGAGATT TATGAAGGGG 240
 ATATTGTTCA AGATTGTTAT TCGAGAGAAG TAAGTTTTAT CGAGTTTAAA GAAGGAGCCT 300
 30 TTTATATAAC TTTTAGCAAT GTAAGTGAAT TACTAAGTGA AAATGACGAT ATTATTGAAA 360
 TTGTTGAAA TATTTTTGAA AATGAGATGC TATTGGAGGT TATGAGATGA CGTTCACCTT 420
 35 ATCAGATGAA CAATATAAAA ATCTTTGTAC TAACTCTAAC AAGTTATTAG ATAACTTCA 480
 CAAAGCATTAA AAAGATCGTG AAGAGTACAA GAAGCAACGA GATGAGCTTA TTGGGGATAT 540
 AGCGAAGTTA CGAGATTGTA ACAAAGAACT GGAGAAGAAA GCAAGCGCAT GGGATAGGTA 600
 40 TTGCAAGAGC GTTGAAAAAG ATTTAATAAA CGAATTCGGT AACGATGATG AAAGAGTTAA 660
 ATTCGGAATG GAATTAAACA ATAAAATTTT TATGGAGGAT GACACAAATG AATAATCGCG 720
 AAAAAATCGA ACAGTCCGTT ATTAGTGCTA GTGCGTATAA CGGTAATGAC ACAGAGGGGT 780
 45 TGCTAAAAGA GATTGAGGAC GTGTATAAGA AAGCGCAAgC GTTTGATGAA ATACTTGAGG 840
 GAATGACAAA TGCTATTCAA CATTGAGTTA AAGAAGGTAT TGAACCTGAT GAAGCAGTAG 900
 50 GGATTATGGC AGGTCAAGTT GTCTATAAAT ATGAGGAGGA ATAGGAAAAT GACTAACACA 960
 TTACAAGTAA AACTATTATC aAAAAATGCT AGAATGCCCG AACGAAATCA TAAGACGGAT 1020
 GCAGGTTATG ACATATTCTC AGCTGAAACT GTCGTACTCG AACCACAAGA AAAAGCAGTG 1080

AGTGGTGTAA GTAGTAAAC GTATTTAGTG ATTGAAACAG GCAAGATAGA CGCGGGATAT 1200
 CATGGCAATT TAGGGATTAA TATCAAGAAT GATGAAGAAC GTGATGGAAT ACCCTTTTTA 1260
 5 TATGATGATA TAGACGCTGA ATTAGAAGAT GGATTAATAA GCATTTTAGA TATAAAAGGT 1320
 AACTATGTAC AAGATGGAAG AGGCATAAGA AGAGTTTACC AAATCAACAA AGGCGATAAA 1380
 10 CTAGCTCAAT TGGTTATCGT GCCTATATGG ACACCGGAAC TAAAGCAAGT GGAGGAATTC 1440
 GAAAGTGTTT CAGAACGTGG AGCAAAAGGC TTCGGAAGTA GCGGAGTGTA AAGACATCTT 1500
 AGATCGAGTT AAGGAGGTTT TGGGGAAGTG ACGCAATACT TAGTCACAAC ATTCAAAGAT 1560
 15 TCAACAGGAC GACCACATGA ACATATTACT GTGGCTAGAG ATAATCAGAC GTTTACAGTT 1620
 ATTGAGGCAG AGAGTAAAGA AGAAGCTGAG CGCAAATACG AGGCACAAGT TAAGATAAGG 1680
 AGAGATGGAG ATGCCAAAGA AACCGGTAAC GATTGATGTA GATGAAACT TATTAGTAGT 1740
 20 AGCTAGTAAT GAAATATCAG AACTATTATA TGAaTATGAC AGTGAGTtAA TGTCAGCTGG 1800
 ATGGAAGATG GCGATAATAG GGATATC 1827

(2) INFORMATION FOR SEQ ID NO: 865:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1379 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 865:

35 TCAATTGCAT CATCATATGA AATTCTaGGG AATGGTGTG CAACTTTTTC AAGTTTTGAT 60
 GTATCACGCT CTAAAATTTT CAACTCTAGT TTACAATTTT CTAAAAGTGA TTTTACAACA 120
 TGTGTTACAT ATTGTTCTTG AATTCTTAAA CTTTCAGCAT GATTTGTGAA AGCCATTTCT 180
 40 CCTTCAATCA TCCAGAACTC GATCAAGTGT CTACGTGTTT YTGATTTTTC AGCTCTGAAA 240
 GTTGACCAA ATGAAAATAC TTTCCGTGT GCCATTGCTG CAGCTTCTAA GTATAACTGA 300
 CCACTTTGAG ATAAAAACGC ATCTTGATCA AAGTATTTAG TATGGAATAA TTCACTTGTA 360
 45 CCTTCTGGCG CACTTGCTGT CAAAATTGGT GGATCAACCT TTGTAAATCC ATCTTTGTTG 420
 AAAAATTCAT ACGTTGCAG AATAACTTCA TTTCTAATTT TCATTACAGC ATGTTGTTTT 480
 50 TTAGAACGTA ACCATAAATG ACGGTGATCC ATTAAGAATT CTGTACCATG ATTTTTAGGT 540
 GTAATCGGAT AGTCATGCGC TTCTGAAATA ACTTCAATTG ATTTCACTTG CATTTCTGAT 600
 CCTAAGTCAG AACGATTATC TTCTGTAATT GTGCCTGTAA CGTATAGAGA TGATTCTTGA 660

TGCATAAAGC CTGTTCCATC ACGTAATTGT AAAAAGGCGA TTTTACCACT TGAACGTTTA 780
 TTTGTTAACC AAGCACCAAT TGTAACGTCT TGGTTTAAAT GATCTTTCGC TTGTTTAATC 840
 5 GTTGTTTTCA TAACCATTCT CCTATTTATT TTTTCGkTAT ACAATACTCA TTCATTTTAA 900
 CAAAATCCGC TTTCAAGTTC TAGAACTAGA CTAAAAGATA ACGtGTAAAT GGTAATGATT 960
 TACGCACAGA TTTGAACATT AATTTATATT AAGACAATAC AATCATCAGT TTCAGACAAA 1020
 10 ATATATAATA AAGCCTCAAT ATTATTAGTA TGAAGGTCGT TTTTGTnCT AACATTCAAG 1080
 TTTAATTATA AAACTCAAAT TTTGACGACC AAACAAAAAT TCTTGTAACA GAACATAGCA 1140
 15 CATGTCATGT CACAAGAATT TTACTTTGTA TTTCACTTTT TCTTTTTTTG AATTTGTCTT 1200
 AATAATTTTC CAACTGTTG AATGTCGCCT TTTTCTGAC GATAATTTTC AAGTGTtTGT 1260
 TCAAAAAAGT TTTTATAATT ACTGTTTATG AGTCGATCAT CAAATGAAAC TATTATGCCG 1320
 20 CGATCATTTT CATTTCTAAT TAATCTTCCA AGTCCTTnGT CTAnAACGTG TAACTGCAT 1379

(2) INFORMATION FOR SEQ ID NO: 866:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 450 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 866:

TTACAACGAA TAGTTCACCG TTCGAGTCTA ATCTATGTAA TGCTTGCTCG AATATACGAT 60
 35 GCACGGTTTC TTTCCCTGCT CTTATTGGTG GATTGGTTAA AATAAAATCA AAACTTTtGT 120
 CTTCCACAGC AGACAAAGCA TCACTTTCCT TTACGATCAC ATTATCAATA CCATTTAATT 180
 TTTTGTTTTT TTCAACTAAG GCTAGCGCTC TGTGATTAAc ATCTAGCATT GTAATTGAAT 240
 40 GATGTGGTGA TACTTTAGCA ATCATCAAAC CAATTGGTCC GTAACCACAA CCAACATCGG 300
 CAATTCGCTT ACTTGGACCA GGTGGATGCG CTTTTAAAAA AGTTTGAACA AGAACATCTG 360
 aACCATAATC TACTTTAtCt TTCGAAAACA CTCctTATCA GTTATTAAAT CAATTTTATG 420
 45 AnGGTTnTAA TTGGATATTG AGTACGTTGT 450

(2) INFORMATION FOR SEQ ID NO: 867:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 867:

5 AATGTTAACA ATATAGCACC AATTAACCCC GACATGATAA TAACGTGTAA TGTTTTATTT 60
 CCTATTAATT GTCTCGCAAT ATGAGGTGCA ATTAATCCTA AAAAGCTAAT ACCACCGACA 120
 ACTGAAATTG CGGATCCTGC TAATATTACT GCTAAAATTA ACAATAGCAT TTTAATAGTT 180
 10 TTAACTTTTA AACCGAGTGC GGTGCAACA GCATCACCTA GATTCAATAC ATCTAATTGA 240
 TAACTCCATA AAATGATGAT GGATCGTTAT TAAAACCAGG GAATATAGAT AATATCCGCA 300
 TATCAGGCCA TATAGCTACC TGTACCAAC AGGTTTnTGC TCCAnGGTTC TnTAATAAGA 360
 15 CGCACACGCG ACAATGCGCT TGCTACCATT AGGCAGCTTG 400

(2) INFORMATION FOR SEQ ID NO: 868:

(i) SEQUENCE CHARACTERISTICS:

- 20 (A) LENGTH: 1132 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 868:

AATCCnTnAA GTGCCATAAC ATCATCTCCT AACATCTTTA TTATACATCA ACATTTTATA 60
 30 AAAATAACnT CTTATGATAA AAATGAAAAT ACTAATTTTA ATGAGAGCGT CTTAAGCCGC 120
 AATTGATAAA ACATATGCTA CAATATTTTT AAACACTATA CAGGAGGTAC TCTATGACAA 180
 AATATACATT TAAACCTAAA GATTTCAAAG CGTTCAACGT AGAAGGCTTA GACGCACGAA 240
 35 TGGAAGCTTT AAACGAATAC ATACGaCCAC AACTCCGTGA ATTAGGAGAA TATTTTAGTG 300
 ACTTCTTTAC AAGTCAAAC TGTGAAACAT TTTATCCTCA CGTAGCAAAG CATGCTAGAA 360
 GAAGTGTGAA TCCTCCTAAA GATACATGGG TTGCTTTTGC AACAAACAAA AGAGGCTATA 420
 40 AAATGTTACC TCATTTCCAA ATTGGTATGT TTGAAGATCA ACTGTTTGTT ATGTTTGGAA 480
 TCATGCATGA AGCAAAAGAT AAAGCAACaC GTGCAAAAGT TTTTGAAAGA AAATTTAAAG 540
 45 CTATTCAACA ATTACCTGAT GATTATCGTG TTTGCTTAGA TCATATGAAA CCTGATAAAC 600
 CATTTATTAA AGATTTAACG GATGATGATT TAATAGAAGC GATACAAAGA GCCATCAATG 660
 TGAAAAAAGG TGAATTCCTT ATAGCGCGTG CAATCACACC ACAAGATAAA AGATTAAAAA 720
 50 GTGACAAAGC ATTTATTGCA TTTTtagaAG AAACCTTCGA TCAGTTCTTA CCATTTTATT 780
 CTGCATAAAT AACTTTGTTT AAATAATAGA GCACTTAATC ACATCCaTGA TTTCGTGctC 840
 55 TTtTTTCTTA ATATTAAATC GAACGTtCAA CATAaTAATT CATACTTTTA AAAAAATTAA 900

GGTGAGTCAA AATGAATAAT AAACGACATT CAACAAATGA ACAATTAAGT TTAGACGAAA 1020
TAAACAATAC AATTAAATTC GATCATCGCA GTTCAAATAA ACAGAAATTT TTATCATTTT 1080
5 TTGGACCTGG GTTATTAGTC GCTGTTGGTT ACATGGATCC CGGAAACTGG AT 1132

(2) INFORMATION FOR SEQ ID NO: 869:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 418 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 869:

CTCAATGTAT TGACTGTGAT TTGGAGTGTA TAATGCTACT GTTTTGTCTA TAGCCATCGC 60
20 ATCAAATATT ATATTTGAGT AATCAGTGAT AACGACATCA GACATTAGAA TTAAGTCTTG 120
AGCACTAAGA TACTTTGGTG CAACAAGCGC CTCCTCTGGT AAGATCGCTT CATCAACACC 180
CTGAACCACA ACATGATAGG CTTTGAATAA AGCATCTGAT AGTGGTAATT GTTGCGCACT 240
25 CACTAATCCA ATAGGTGCGT ATAATAAAAC TGGTTTTTGA TCATTTATTT TAAACGATTT 300
CTTATACTGT TGTTGAGTAG TACTTTCGTT ACTCTTTTGT AGTAAATATT GGTGTTTAGG 360
ATTACCATAA GCCAATACAT TGCTTGGTGA CTAGGAAAAG nCGTTTGATA AAAGGGCT 418

(2) INFORMATION FOR SEQ ID NO: 870:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 587 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 870:

GAGTnTGTTA CAGTAATTGA TTTTATTGGT AATTnTAAGA CAAATTATTT AATTCCGATT 60
GCGCTTTCTG GGGATCAATC GCAAnATAAA GATAATTATA AGAAGTTTTT AACGAATAAC 120
45 GATTCGATTA ATGGAGTATC TACAATTAAT TTTGAAGAAG TTGCTAAAAA ACAGATTTAC 180
AATTCATTGG ATGCAGTATC ATTAAATCAA AATAAATTAA TATTAAAAGC TTATGAAGAA 240
50 GTTGAAAATA GATTGGGACA CATGCCGTTA CTAATGGATT TCATACAACA ACATTCTATA 300
GATCCAAGCG TTATATTTTC TAAATTTAGT AATTATTACG AGTTCTTAGT GAGATATAAA 360
AAAATAGATA CATTATTGAC GGAAAATGAA TCTAAAAATC TGGTTTTCTT TTCAAGGCAA 420

TTAACATATG ATGAATTAAA AAATAAAATG TTGAACGAAG TTAAGGATAT AACAGAAGAT 540
 GATATAGATA CTTCATTAAG AATTTTAGAT TTTTCATTTT ACAACGC 587

(2) INFORMATION FOR SEQ ID NO: 871:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 971 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 871:

CTACTAAACC AGGTAATCGG TAGAATCCAA GCAGGAATAA ATAAATTAAT GCnACACCAA 60
 TAAACGATGC AAACACAGTh TTATCTAATG CATCTTGACC AAATTGGGCA CCTACTGAGT 120
 TTGAATAAAT TTCTTTCAAG TCAACTGGTA AAGAACCTGC ATTTAACAAT kCGGCGATTT 180
 GTTTTGCTTT TTTAACGCCT TCTTGTCCTT TAAATCCACC CGAGATTTCT ACGCTATCAG 240
 AATTGATTGG TTGATCAACA CTTGCTGCAG AAATAAATTT AGGGTTTTTC TTTTGTGCTT 300
 CTTTTTTATA GCTGTCCACCT TTTTTGAAAT CTAACCAAAC AACCATGACA TTATCACGTT 360
 TCTTAGAGAT TTCTCCGTT ACTTTTTTAA ATTTGTTTTT GTCTTTTACT TTAAAAGTAA 420
 CTGTAGGcTG GTTTGTTTCC tGcTTAAATT CTTGcTTGGC AGATCCCTGT TTaATATCAG 480
 AACCGCTTAA TTTtACTTTA TCTTCTGCAT CGCGAATTGT TAAATTAGCT TGAGAAGATA 540
 AAATTTTACG TGCTTCATTC TGGTCTGTTA CACCAGCAAG TTGTA CTCTA ATTCTATTAG 600
 GTTCTTCAAC TTGAATTTTA GGTTCGAAA CACCTAAAAC GTTAACACGA TTTTCTAATG 660
 TTTGCGCTGT TGATTGTAAG GCTTTTTTAT CTATTTTGTC GCCTTTATTT AAAGGATCGA 720
 CTTGATAAAG CACCTCAAAT CCACCTTGCA AATCAAGTCC TAAATTGmCA TTCTTTATAA 780
 CACTTTTATA AGTTGcAGCC ATTCCGGCAA ACAACAATAC GACTAAAAGC AAGAACGCAA 840
 TTATTCTACT ACTTTTCTTC ACATGAACAC CTCATTATTT ACGTATGTAT TTAGAATACT 900
 TGAATACTAT TTTATAACGC AAGTGAAATC TTTCTTACAA AATTTATTAG CCTTATACAT 960
 ATTAACATAC T 971

(2) INFORMATION FOR SEQ ID NO: 872:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 636 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 872:

CTGGTTAACA ACATCTGGTT CGGCATCTCC TTAGCTTCCA CTAAATCTTG GATGTCTTGG 60
 5 nnATCTTGCG CAAGTnGTGC TTTGGCTTGT TCAATTtCTy CTTTAGTCAT CGCATTGTTA 120
 ATGCCGTTAT GACCTTGTTG AAGTATTTGA TTAATACGAT CTTTAAGTGC TTGTTTTTCC 180
 TTATCTGTTA GATTTGGATT TCGATCAATT TCGTCAATTA ATGCTTGaAC TTGcTTATCA 240
 10 ACGTCTTTAT TGGCATCAAT TTTTGCTTTT GGTATTTTCAT TGGCATGCAC TTGTTCAATC 300
 GCGTGGTTGC CTGCTGTTTG AACTTGAGAT ACAGCCTGAT TACTTGTTGC TTTATTAATG 360
 15 TTGTTGATGA TGCTGTTTGC CAATTCTTCT GCTTTATTTT TCGCAATAAG CTTGTCTTGA 420
 TCCGTCGCAT TTGAAGCTTC GATTTCTTTT AGCTTATTAG CTAAAGCTTG ATTAATAGAT 480
 TGAATTGCCT TGTCTTTAGC ATCTTGAGT CGTTGATCAC CATTAAAGATT ATGGATTGCA 540
 20 TCATTGACTG CTTGGATTGC GCCATTGATA TCATTACAT tTGTGTaTCA CTATTTAGCA 600
 ATGTATTTGC TAGACGTTgG CATCATCGAA GTTTGT 636

(2) INFORMATION FOR SEQ ID NO: 873:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 659 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 873:

CTCTGAATGC ATTCATTAAA CGCTGGGTCT CTTTATATGA AACGTATTTG TCATTTTTAG 60
 35 AACTCAATCC GTAAAAATTG TCAACTTTCT TTTTAATATT ATCGTAATCA ATGGTTACAT 120
 TACTTAAATC AATATCTAAA TCTATATTTT CTGCATCTTC TTAAAGCCC GCTATACTGA 180
 40 AAAAGCCTTC AATCGGCTGA TCAATCATTT CAATATATTT TAAAGCTGTG ATTGAACCTA 240
 AACCATGTGT TACAAAATAT GTATCCTTTT TGCGTACATT AATTTGTTTC GTCATAGCTT 300
 CAATCCACTG ATCCACTGTC TTCGCTtCAG GGGATTCAAA ATTAAATAAT GTTACGTCAT 360
 45 ATCCTTCTAA AGTTAAGTTA TGCTCCAACC ACTGATACCA ATGATTTCTA CTATTTCCAT 420
 GCATAGAATG TACAATAtTA CATCTGTCAT CTCATTCTCT CTTTTCAACT TACTACTTCT 480
 TTTCTATTTT TAAAAAATG ACTGATTACC TATAATTGTA AAATAAAAAC ACCTTAATTA 540
 50 GAAATGTTAT ATCGCAAAGT GACATTTCTA ATTAAAGTGT ATTGTCATCA TTTCAATATC 600
 ATTCAAAAAC AGCTAAACCT TTGTCTCTGC TTCAATTTCA CAAAAATAAT TCCCGCTGA 659

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 315 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 874:

AAAATAAAAT CCATTTTAGT ATTCGTAGAA AATGAGAGCC CCCTTTACCA CAATATGTAA 60
 ATGTATATTG TGAAAAGGGG GCTTTTATTT ATGACATAGT TGTTCAACTC ATACATTCAG 120
 TTGATAATGC AGTGC GTTAT GCAGCTATCC ACTTCATATG TATGGCGCAT ACTTGATATA 180
 TGAATATCAT CAAGATTTTA AAAGTATCGC TAATTTTAAA GTCTTAAAC GCAGATTAAT 240
 GGTCA TGATG TGTTAaTGCG TTTTGTTTT TAGAGCCACG TAATTCCTCAn GGACATATAG 300
 GAGGAACCAT TCCAC 315

(2) INFORMATION FOR SEQ ID NO: 875:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 482 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 875:

TACACGACCT TGTAAC TCAG CTGCTTTATA AGCTAGGGCG ATGTTATCAA AGTTGGATGT 60
 ACTTTGAGCT TGGCATTTCG TTAATACTTT TAACGAAGGA TTTAATATAT GTCTGATACG 120
 TATATATTGA TTATATTCAA TTCTTaATTt GGATAAGATT GCTGATAATT TGAAGCAATC 180
 GGAGCTAAAT GGATCGAAAA ATGAATAAAT TTCGATTTTA CTTACAGGTG ATAGaTTGAT 240
 ATCTTCACGA CTCTTATTTT CCATTaWTCG TAATTCTCCA GCCATGTTTA TTCACCTACA 300
 ATTAATTTTA GGAATTCACC ATATGaTTAG CAGTTAATCT TaAGCGCTCA AATAAATAAT 360
 CTCCAACACC TTGTGGAAAC caGCgCGaTT AATTGCTGTC TGCATATTTT CTAGCCATGC 420
 ATCTCTTTCA AATTCAGTGA TTGTAAAATC TATATGTCTT TTTCTTAGCA TAGGATGTCC 480
 GT 482

(2) INFORMATION FOR SEQ ID NO: 876:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 670 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 876:

5 ATGCAATTGA ATTCTTAAAA GCAGAAGGCT TTGATGATAT TGAATGGGGC GAAGATTTTG 60
 GTGCGCCACA TGAAACAGCC ATTGCTAATC ATTATGATTT ACCGGTGTTF ATTACTAATT 120
 10 ATCCAACTAA AATTAAGCCT TTCTATATGC AACCAAATCC TGAAAATGAA GAACTGTAT 180
 TATGTGCAGA CTTAATTGCA CCTGAAGGAT ACGGTGAAAT TATTGGTGGA TCTGAACGTG 240
 TGGATGACTT AGAATTGTTA GAACAACGCG TTAAAGAACA TGGATTAGAC GAAGAAGCAT 300
 15 ATAGTTACTA CTTAGACTTA CGTCGTTATG GTAGTGTGCC AACTGTGGA TTTGGTTTAG 360
 GTTTAGAGCG TACAGTAGCA TGGATTTCTG GTGTTGAACA CGTTCGTGAA ACAGCGCCAT 420
 TCCCAAGATT ATTAAACCGT TTATATCCAT AAGTTTTAGG GTCGTTACTT AAAATATATA 480
 20 TTATGATAAT AAAAGAATC GTCCAGCCTA TATTAATAGC TGGGCGATTT ATTCTTGGA 540
 AATGAAGATT GATAACGGCT TATATTAATC ATGAACAAAC TTTTGTTTAG TAACTATATT 600
 TGGAAAATAA ATAGTTCATC TGATTATCCA TAAAGTTCAT TGTAAAATC TAGTGTTAAA 660
 25 AAATACTGTT 670

(2) INFORMATION FOR SEQ ID NO: 877:

(i) SEQUENCE CHARACTERISTICS:

- 30 (A) LENGTH: 1258 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 877:

40 TGCAAAGTAA ACTGGATGGC TnTCTTGCCG CCAAGGATCT GATGGCGCAG GGGATCAAGA 60
 TCTGATCAAG AGACAGATCC TAACCTCTCA TTTCCGATAA GTTTAGTATG TATTATAGGT 120
 GATGATTnTC TTGTTTTCAA CCTATACAC AATATTTTTG AnATTTATAT TATATTCATA 180
 TAAGGAAGGC GATTAATTAC GATTCATCAT TATATCTCTA CGTGTTAATT TATTAACCTA 240
 45 TACTATATTT ATCaACaCAA CAGTTTTTCC TTTCATTTTC AAACATAACA GAAAAAGCCT 300
 GAGACATACT TAGTCCCAGA CTGTTCTATA ATTAATTAAA GATATAACAA GGTTAATCAT 360
 TCAAAGCTAA CATCACATTT ATTCACTGTA ATTTTTCATA AAGAATAATA ATGACTGTAA 420
 50 TTCTATACCT AAGTCAATTT GATGTAATTG CACATCTGAA GCGTATTAA TTCTACCAGG 480
 AGTGAAGTTT AAAATACCTT TCACACCAGC TTGGACGAGT TCATCTGCAA CTTTCTGTGC 540

TAATTCATCG TTATCTTTAA CAATAACGTT CCCTATTTTC TGGCCAATAA CATCTTCTTT 660
 TACGTCAAAC GCTTCTGTAA TCGTCATATC GTCATGTATT GAAAAGTTAT ATGTGAGCAA 720
 5 AGCTTTCCCT AGGTTCCCAA CTCCGACAAT TGCgATTtTG ATCATGTCAC TCTCGCTTAG 780
 TTCAGATTTA AAGAAATCCA ATAAACTATC TATATTATAT CCGTaCCCTT TTTtACCTAA 840
 TTCGCCAAAA TATGAAAAGT CACGACGAAT TGTtGCCGAG TCAATTTGTa ACGCATCGCT 900
 10 AATCGCTTTT GAATTTACAC GATCTATACC TTTAGATTTT AATGAACTGA CAAATCTATA 960
 ATATAACGGC AAACGTTTTA AAGTTGCTCG AGGAATTTTA ACTTGGTCAC TCATTCGCTA 1020
 15 TTTCTCCTT CGTGTtTGAA TGAATTATAT CTATGTATTc AAACGAGTTA GAGCGTAATT 1080
 GTTAGATTAT TAAAAtACAA ATAATTGaTT ACAATGAATA CCTAAATATT ATACATTaWT 1140
 GAATTTTAAA AATAAATATC TTAGTTTCAA GACGGCGTTT TATACTGTAA AATGGTTATT 1200
 20 AATGTAATAA TTACGCTTGT TTCATAAGTT AATAAAATTt GAGAAGACGA AGGTGAAG 1258

(2) INFORMATION FOR SEQ ID NO: 878:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 546 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 878:

AAACAATCCC CnCCAAAGTA ATTCCACCAC TAATTGTAAA TAACTTTGGA AAGGATGTTG 60
 35 TTTGTnATTC CCATGGACAC ATGCCATCTn ATTTAAGTTT TATACTCTAT TTTTCTGATG 120
 TCTTGATTAA TTGCAAGCGG TCTTGCGAGC CTTGTTCAAG CTCATATTCT TTATCTACTT 180
 GCTTACCGTT TTCryTTATT AATCTTACGG TTGCGGTAAT CTTATCACCA TGTTTTTCAG 240
 40 CATCTATAAT TTGTGGTGAA CTAATCATCA TTAAACTTCC TTTAGATACA CGCTTCTTTA 300
 CATCATCATA AAAAGATGAT CCTTTTTTTT TATATGATGA TACAAAATCA AAATCCGACT 360
 GATTAAACGC AGCATTATTC GCTAAAGAAT ATCCAGCAAA GAATTCTATC AATTGTCTCT 420
 45 TCAAGCTGTT TTCTTCTTTT TCTTTCTTTT CAACATAGTC TTCGATATCT TCACTGTCAA 480
 AATTCAAAGT TATCTCTGTA TTGTATTTTA AATCGCTAAG CTTTAATCGT CTTCTGCTGT 540
 50 GATGTA 546

(2) INFORMATION FOR SEQ ID NO: 879:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 870 base pairs

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 879:

TTTATGAATT TTTTATGTAA CATTAAATAT TCTTCTGGCA ATCTTCctAC TATkTCTkTT 60
 10 ATATATCCTT CTTCTCCTTC TTTAAATACT AAACCTGTGG GAGTTAGTGT GTTATACCTA 120
 ATTTCTATCT CATTCAAATG ATCATTCAAA AGGTCAAAAA ATTCTCTATT AAAATAACCC 180
 CATTTCccAT TTTGTAATAA ATATTTCTTT CCATCTTCCA TTTCAACTTC TGCATGTAGT 240
 15 ATCGTTTTTA GTaGCATATT ATTTGAATGC CCCAAATTAT CkATCACKtC AATTCTGACA 300
 TCATTTATAG AATTAACGTC ATATTTTAAT AAGTAATCTC CTATTTcAGT GATGTAATCA 360
 ACTTCAGGAT CAGTCGCATC AAATGTCTCT AATGTATTAT TTTTAAAAGA ATTTATATAT 420
 20 ATATTGACGT CGAGCATATC ATCTAACaAG AGTATCATAT TACTTAGTTC TAAAAATCTT 480
 GATATATCTA TAGATATATT TTCTGTAGTT GAAGAATTcG ATAGTTTTTTT TAGCAATAAA 540
 GTATCTAATA CTTCTATTTT ATTCAAGTCT TTTAAAGTTA CTATTCTAGG AAATTCACtA 600
 25 ATTTTTTGAG GAAGATTAAT AATAGCGTTT ATTTCTTTGA TTATCACACT AATTTTATCT 660
 ATGaATTGCT GcTTTCTATT CGGtACACGC AATGaAATAC TTGTACCACA AGTCCATTGt 720
 30 TTTTCCaAAA ATTTGAGGaT TCTGTGGaTG tCCTTGGaCT GGaTATATAA GATTCTGAAG 780
 GTCTAACGTA ATCTACACTA TTCCTTCTAT AATTAACAAT CTCTTTAAGC CTGTTTTGTT 840
 GAAAAAATT AACATTTTTA nTAACTAnGG 870

35

(2) INFORMATION FOR SEQ ID NO: 880:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 40 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 880:

GGTTTACATC TTTATCAACT GTAATTTcAT TGACATCTTC ATTcATATTT AAAACACCAT 60
 TAAATGTCCC TGAATATTCA CTGTTTGTt TAACTGTGGC AGTGACTTGT CGTTACCATA 120
 50 TGTCATCATA TATTGTGCAa ATGTTAAAGT CCCcATTGAG TTGACCGACA AAGTTGAATT 180
 TATCGAATTG TATTcAGATT GTAAACTTAG CAGACATTTT TAACCACGAG CATTCTTATC 240
 CAAATAGnCC TTGTCTGTtA TTTTCAAGTC AATTTTCACA ATAGGATCAC TGCATCTTTT 300

55

ACCCTCTTTT TCTGCTnCTC ACATAACTTT CAGATGGACT

400

(2) INFORMATION FOR SEQ ID NO: 881:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 333 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 881:

AAGATATTGC GAAAAGAAGT GACAGTAACA GAGGAATTC AAAATTTATT CAACCATATA 60
 TTGAAAATTG ATGAAATGGT GCATGCAAAT GAAGCGCGTA TTGCGTATGA AGCAGACATG 120
 CGAAAACCTT TATATAGTAA ACGCATTAT CAAAATTTAA CATTAGACTC TATTGTTTTT 180
 AGAAATACAT TGAGATATAC AGCGATTATG ATGATAGCGG ATATTTATTG CGTTAATGTT 240
 TGATTTTGAA AAAGCATCCT GGATCCCGTT ATCTGCACAT CCAnTATTCC TAGGGCCATC 300
 AnCCTATACC ATGCCATCCG AGAGAGGTAT GGr 333

(2) INFORMATION FOR SEQ ID NO: 882:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 617 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 882:

ATTGAAAGAA AACTGACGT ACTTATCCGA TGATAAAATG AAAGAAGTAG ATAATGCACT 60
 AATGATTAGT TTAGGGCTGA ATGCAGTAGC TCACCAGAAA AATTAGGCGT CTATTATATG 120
 TATTTTTTCAG AGATAAATAA AATATTGATA TAAAAGACAA TAACTTTATA ATAATTATAA 180
 CTATTTCTAA ATTCTGTACG AAGAATTTTC TTATAAACAA AGATTTTAGC AAATACCAGT 240
 TATGATATTC ATATTTTTTA TTATAAAAGG ATGTCCTAAG TTTTTTAGGC TTTAGGTATT 300
 CCATCCTAAA GTTTTTTTAG CTTAAAAGTA TCATCTACAG CAAAATTGCA AACGACAAAA 360
 TTGATAAGTG CAATTAAATA AATGTTAGTA AGTGAATCAT AATTATCCTT GCTTAAGCAT 420
 TTGCTTTGTA AGGGAAGTGA GGAGGCAACT AATCGTGGAA GAATTTAAGC AACATTATAA 480
 GGGTTTAATT GATGAAAGTT TAACGTGCCA AGATAAAGTA GAATTGATAA AAAAGTGTGA 540
 GAAATACACT GACGAAGTGA TTCGTAAGGA CGTCTTGCTT GAAGACATTG TCGATATTCA 600

(2) INFORMATION FOR SEQ ID NO: 883:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 583 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 883:

GTTGTATTAA AATTTTTTCAA TTTAACAACG AAACAATACG AAGAAAAACA TATTACTGAG 60
 CCACTGGAAT TGACGAGCTT ATTAGGTAnT ATTTCTCGTC TAGACAATGG TCATTTTGCA 120
 CATTTGCATG CTACTTTCGG TACTCAATCA TATGAACTT TTAGCGGACA TCTCGCTAAA 180
 GCAATTGTTT CTGCAACTGC TGAAATCATT CTTACTGTAA CTGATTTGGA CATTCAACGT 240
 TCATTCAAAG ATGCAGTCGG TTAAATTTA CTTGATCCTC AATAGCACTT TACTTTTTAG 300
 TTGAATCAAA TTTTATTACA AGTTATCATA AGTGCTTAAT CATAAATGCA TTCTCGTTTA 360
 TTAATATACT TCAACGAGTT AAATTAAATT TTAAATTAGG AATTGAATGC GTTTATAACT 420
 ATCACATTTG aATGaATAAC TTTTTCATTA GAAAGTAGTG TkTATTATTG aTGCAATCTC 480
 GaTACATCGC TAGAATTTAC TTTtaATTTT ATTTATCGTC TCCCTTnTTG AGACTAAAAT 540
 TTTTCAATTT ATGACTTTAA ATTTGTTTTT AGCATATATA CCT 583

(2) INFORMATION FOR SEQ ID NO: 884:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 524 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 884:

GCAGAGGGCT TACGATAAAA AGAAAAATCT CGCTCGCCCG CTTCAGTCAA ACTCACAAAA 60
 GcTAACGCAt GwyTGCTyCA TTCGTGCGAT ACACTTTTGA TACATCTACA CCAATACTTG 120
 ATATCGTTTC AATAATGCTA TCTCCAAATG CATCATTACC TAATTGTGTA ATCATAtACG 180
 CTTGTTGTCC tAACTTTTGA ACTGTACAAG CTACATTGCA TGGCGCGCCA CCAATTTGCT 240
 TCGTAAATGT TTGAACATCT TTAAATTTCG CATTTGTAAC ATTTGGAATA AAATCAATTA 300
 ACGCTTCTCC TATTGAAAAT AGACGTCTCA TTTATGTTCA TCCTTTAAAT CATATTTAGT 360
 AAATTGTAAA TATACTTGCC CTGATTCTGT TGATGTTTTA ATACCTAGTG CGTCTTCTGT 420

TGTATCAACA AAAATTTGTA ATTGCTTTAA TGGCGTGTCT AATA

524

(2) INFORMATION FOR SEQ ID NO: 885:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 885:

TTAATGATTT CTTCGTATGA TTCACCAACA ATTTGCGCTA AAATATCATG CGCAAGTACT 60
 TCACCTTCAA CCATAAATTC TATTTGCTCT ACTAAAAATT TTACGTCATT CATGCTATTC 120
 ATTTTTGGAA TTAACAAAGC ATATAAGTTT GTAAATTCTT TTAAATACGC AGCATCAGCT 180
 TTTAAGTAAT GGCCTAATGC GTCACCTCTA TATCTCCGGA TAACATCTTC TGAATAAAGT 240
 CATCCTCATA AATATCATAA TGATGGCTTG CAGCTGGGTA CAATTTTGTG AAATTCCATG 300
 TAAAAATCCT CCCTAAATAA AAACTACTT CCAACATGAA GAGTTGAGGC ATGTGCAAAC 360
 TAGCCCATCA CTCATAACAC TTCCACGTGG GACTACCAAC 400

(2) INFORMATION FOR SEQ ID NO: 886:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 857 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 886:

AAGAATTTAA ACAAATGAT ATTTGGAAAC ATTTTAAAGC TGTGAAAAAT AATCATGTTT 60
 ATGACTTAGA GGAAGTGCCA TTCGGTATTA CAGCAAATGT TGATGCTGAT AAGGCAATGA 120
 CTCAATTATA TGATTTATTT TATAAGGATA AAAAATAGTG AGTTGATATG ATGATAAAAA 180
 ATAAAAAGAA ACTACTATTT TTATGTTTGT TAGTCATTTT AATCGCAACT GCTTATATTT 240
 CGTTTGTAAC CGGTACAATT AAATTGTCAT TTAATGACCT ATTTACAAAA TTTACAACCTG 300
 GTAGCAATGA AGCAGTGGAT TCAATCATTG ATTTGCGATT GCCACGTATA TTAATTGCAT 360
 TGATGGTTGG CGCAATGTTA GCAGTTTCTG GAGCATTATT ACAAGCAGCA CTACAAAATC 420
 CTTTGGCAGG GCGAATATCA TTGGCGTTTC CTCAGGTGCA CTTATAATGA GAGCCTTTGt 480
 ATGTTGTTtA TTCCACAATT GTACTTTTAC TTACCATTAT TAAGTTTTAT TGGAGGTTTA 540

ATATTAGTAG GTGTTGCGTT ATTCGTATTA TTAAATGGTG TTTTAGAAAT TTAACTCAA 660
 AACCCTTTAA TGAAAATTCC TCAAGGCTTA ACAATGAAAA TATGGAGCGA CGTATACATA 720
 5 TTAGCAGTAT CAGCATTATT GGGATTAATA TTAACATTAC TATTGTCCCC TAAATTGAAT 780
 TTAATAAATT TAGACGACAT ACAAGCGCGA ATATCGGTTT TAATATTGAT CGTTACAGAT 840
 GGTAAACAGG GTTATTA 857

10 (2) INFORMATION FOR SEQ ID NO: 887:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 675 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 887:

GATTTATTTT AATATTATTG TTAGAAGGAA TTTTACAAA TTCAGCGAGT GCAATCGAAT 60
 ATTCAGACTT ACATCATAAA AGTAAGTTTG ATTCAAAGCG TCTAAGTAAT GCTAAGATGT 120
 25 CATTCACTAA TCCAACCTCAG CTTGAAAATA AAAACACAAA CGATAGACTG TTGAAGCATG 180
 ATTTGTTATT TCATGACATG TTCGTAAATG ATGATTGGAA AAAGGATTTT AAAGTTGAAT 240
 TTGAAAATGA GGCACCTTCA AAGAAATTTA TAAATAAGGA TATCGATATA TTTGCTGGAA 300
 30 ATTATGGATA CGGATGTCAT GGGGGAGCAA CCAATAAAAC GCAATGTAGT TATGGTGGTG 360
 TTAATTTAAG TGACAATAAT AAATACGATG ATTATAAGAA TATACCTTGT AATTTATGGA 420
 35 TTGACGGACA TCAAACAGAA ATAGAACTAA CTGCAGTAAA AACGAAAAAG AAAATTGTGA 480
 CTATTCAAGA ATTAGAGGTT CAATTAAGAA ATTATTTGAA TGAGAAGTAT AAGTTGTACG 540
 AACAAAGGTGG CGACATTGTT AAAGGGTATG TTAAATATTA TAATGATGAT GAACAAAATG 600
 40 TAGAATATGA TTTTATAAT TTAAATGGTG AGTATGGTCG TGAGGTATTA AAAATGTATG 660
 CnGATAATnA AACnA 675

45 (2) INFORMATION FOR SEQ ID NO: 888:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 851 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

55 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 888:

	AATTCCTAAT TAACAATGCC TTCATTTAAA AACCTTCTTC CATCAATTG ATGTTTTCAT	120
	GATATTTAGG TTTTCTCTTT TCAAGATAAA CCATTAAGTy CTCAATAGAA GGTGTAGTGA	180
5	TATTCACTTT AkGACCTAAA ATTTCTTTAA ATACTTGCGC ATGTTCTGTT AATCCTATAA	240
	ATCCCGTACG CTTATGTTCT TCATAAATAA GTAGAGATGC TAATTCATCA TCAAGGTCCT	300
10	CAATAGCACC ACTCACAAC TGAATATCTTT GTAACAGTTG TTCTTTTGAA CCATTTAAGA	360
	TAACTTCACC GTCACCTAAG TGAATGATAT AATCAGCTAT TTTTCTAAA TCTGAGATAA	420
	TGTGTGTCGA CATGAATATT GTTTTATTTT CATCAATTAA TTCTTGCTGA ATTATCTCCA	480
15	ATAGCTCATT TCTAGCTAAG GGATCGAGAC CTGAAGTAGG CTCATCAAAA ATATACAATT	540
	CAGCATGATG TGAAAATGCA ACTGCTAGTG ATAATTTTCAT TTTTCATCCCA GTCGAAAATG	600
	TTTTTATTGA TTTATTGATT GGTAAATCGA ACTTTTCAAG ATAAAATTCA AATACTTGAT	660
20	GGTCCCATT ACGATAAAAA GGGGCAATCA TTTTTCAG TTGCTTCGTA GTCCATCTCT	720
	CATTAAATA ATTTTCAGAG TAAACnAACC CAATTCTATT CTTTAACTCT ATCGGATTGA	780
	GAGCCATATC CTCTTCTAAT ACTCTAATAA CACCAGTTTG TGGGTGATAC AAATCCATAA	840
25	TTAACCTAAT n	851

(2) INFORMATION FOR SEQ ID NO: 889:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 362 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 889:

	AATCACCTTC ACGCCAATAT TGATTTTCAT GCGTAAATAC TTGTGCCGTT TCATGATACT	60
40	TTGTCAATCG TCGTGTTGC TGGGGGAAT ATTTTTCAGT AGCCCAATTG GCTGCATGAC	120
	CTTCAATGGC TAGTTCAATT GCAGGATTAA TTAAATCTTC CAATGACAAT TTAGCATAAC	180
	GCTTGTGAAT ATAATCAAAC AGCTTTGGAA TTGCTGGCAC ACGACAGTTT TACCATGTGT	240
45	AGTCATATCA AAAAATGATT TATATTCGCC TGAATCAnCT AGATAAAATT GGTTGGCTAC	300
	ATGGTCAGGG TGCTGGCTCA CGGTGCATCA AACGCnGnTA ATACTGCCCA GTACCTTTGC	360
50	TC	362

(2) INFORMATION FOR SEQ ID NO: 890:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 747 base pairs

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 890:

TTGGTTTATT CCCAAAAAGT ACGCGAAAAT TAGTAGAGAA GAATTTGAAA GTTTAAATAT 60
 10 TGTCAAACCC GCTAAAAATA ATACTTTCTG GCCTGTTGCA GGATTTGCAG TGTATTAAAC 120
 AACCTTAACA AGAAAATATA TCTATTTGCT TAACATCCAT TTAGAAAAAG AAATAGTTAT 180
 ATTAACATGC TGTATGATAC TTCTAGGTGT TTTTCGCATTG TTTATATATA TAAATACAAA 240
 15 ATTGAAGTTA CATATTTTGTG ATAAAAATAA AAGTAATAAC GAAAAGATCA TATTAATACC 300
 TACATTTAAA AATATTTGTT TATCCTTATT TGCTTATATA TTATTTGGTG GATTGTCAAC 360
 AATGGCTCTG AGTATGTTAG TAACTTCATC CCCTCAAAAT ATAATAGAAT TTCTTGCTTT 420
 20 AATTGGCATG ACTGCATGCT TCTTTCTACT GAATATGTCA TCGGTTCTAG ATAAAAAAAT 480
 TCATGTTATT TTAAAAACAA ATAAGTAGTA AAATTGATTA ACTTAGGTAG TATCGGATAC 540
 TTAAATGTTG GTTCATAAAA AGCAATGATT TTAAATCGAG GAGCTATCTT AGAAGAGGGA 600
 25 AATAAAACAG CCAAAGTTAT AAAAAGTGAA TTAATAACTA ATTATATTAT GTTAGCCACG 660
 CTTCAAATAA AaATAATTA GAATAAGGTG GGATTGATAA TCAAnGCTAn GCGAATCTAA 720
 30 AATCATCAAT AAAAACCCCA AATATAG 747

(2) INFORMATION FOR SEQ ID NO: 891:

(i) SEQUENCE CHARACTERISTICS:

35

(A) LENGTH: 526 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 891:

ATTTTGAAAT TTTAGCAGAT ACTGATAATG GTCTCGATGC AATGAACTT ATTGAAGAAT 60
 45 ATAATCCTAA CGTTGTTATT TTAGATATAG AAATGCCAGG CATGACTGGA CTTGAAGTTT 120
 TAGCGGAAAT TAGAAAAAAG CATTGAATA TTAAAGTGAT TATTGTAACA ACTTTTAAAA 180
 GACCGGGATA CTTTGAAAAA GCAGTTGTGA ATGAtGTGGA TGCATATGTT TTAAAAGAAC 240
 50 GTTCTATAGA AGAATTGGTG GAAACCATTA ATAAAGTAAA TAACGGAGAG AAAGAATATA 300
 GCGCCACATT GATGACTTCA TTTTTGTAG ATAAAAACCC ATTAACGCCC AAAGAACAAA 360
 TTGTATTAAAG GGAAATTGGC AaTGGTTTAA GTAGTAAAGA AATAAGTGAA AAATTATTTT 420

55

ATCGTTTTGA TGCTTGGGAA AAGGCAAATG AAAAAGGCTG GACCTA

526

(2) INFORMATION FOR SEQ ID NO: 892:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 751 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 892:

15	TATTTGATGT AAAAGCGAan GAACCATACA ATGTAACAAT TACTAGTGAT AAATACATCC	60
	CTAATACTGA TTTGAAACGT GGGCAAGCTG ATTTATTTGT AGCGGAAGGT TCTATCAAAG	120
	ATTTAGTGAA ACATAAGAAG CATGGTAAGG CAATTATAGG AACGAAAAAA CATCATGTTA	180
20	ATATTAAGTT ACGTAAAGAT ATTAATAAAA TCTATTTTAT GACAGATGTT GATTTAGGTG	240
	GACCAACGTT TGTCTTAAAT GACAAAGACT ATCAAGAAAT AAGAAAGTAT ACAAAGGCAA	300
	AGCATATCGT CTCTCAATTT GGATTCGATT TGAAACATAA AAAAGATGCT TTAGCATTAG	360
25	AAAAAGCGAA AAATAAAGTT GATAAATCTA TTGAAACAAG AAGTGAAGCG ATAAGCTCAA	420
	TATCAAGTTT AACCGGAATA TTATTATTTG TAACATCATT TTTAGGTATT ACATTCTTGA	480
30	TTGCTGTATG TTGCATTATA TACATAAAGC AAATAGATGA AACC GAAGAT GAGTTAGAGA	540
	ATTATAGTAT TTTGAGAAAG CTTGGATTTA CACAAAAAGA TATGGCAAGG GGACTAAAGT	600
	TTAAAATTAT GTTTAATTTT GGGTTACCTT TAGTTATTGC ACTATCACAT GCATATTTTA	660
35	CATCATTAGC ATATATGAAA TTAATGGGTA CAACGAATCA AATACCGGTT TTCATAGTAA	720
	TGGGATTATA CATTTGTATG TATGCTGTTT T	751

(2) INFORMATION FOR SEQ ID NO: 893:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 357 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 893:

50	GGATGTTGTA CATTATTCAG ATTACTTTGA AGGGGCACAA AAATATTTGA GCTATTTAAA	60
	ATCAACAGTA GATGTAACT TTGAAGGTTT GAAAATTGCT TTAGATGGTG CAAATGGTTC	120
	AACATCATCA CTAGCGCCAT TCTTATTTGG TGA CT TAGAA GCAGATACTG AAACAATTGG	180

TAGCTGAAAA AGTAGTTGAA ACTGAAATGA TTTTGGGGTT AGCATTGGA CGGCGATGGG 300
 AGACAGAnCC ATAGCAGTAA GATGGAGAnG GnCCAATCCG TTGACGGTGG ACCCAAT 357

(2) INFORMATION FOR SEQ ID NO: 894:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 464 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 894:

GCTAACCTGC AAAATTCGAT AAGCGATTCA ATaCTGAcGC CTGcATTTCG CAAATTTTTC 60
 ACTAAATAAA TCCAATTTAA ATCACTATCA TTATATATTC TATATCCATT TTCATCTCGA 120
 TTAAGTGGTG GAATCACACC AACCTTTTCA TAATATCTTA AAGTGTCTTG AGATATATTC 180
 ATGAGCGCTA CGACTTCTTT AGTTTTCTTT GCGACTATCC TTTCAGTTAT GTTTGGTCGT 240
 CTAAAGTAAT GTTGCTTTAT ATATTGTCAT CTTCGTTTGA ATACTTCTTA TTTTATTACT 300
 CAAATTTAAA TTTGTCTCTT TTTTAACATT TTACATTTCA TCGTTTTTAA TTACTTTAAA 360
 AATTGTATAA CTkAAATATT TAAAATGATA TAAwCACTAA GATTGaTAAT AtTTAATThT 420
 TTGGAAAATT ATnTTAAGTT GCCAATTTTG GGGGGATGCG GAAA 464

(2) INFORMATION FOR SEQ ID NO: 895:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 599 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 895:

AnAATGAAAG AGTTACAGGA CTTTATTGCT CGTTTCTCAG TAACGCTTCT AAATCTAAAC 60
 AAGCAACAAG TCGTAAAAAA CAACTCGAGA AAATTGAATT AGATGATATT CAACCATCAT 120
 CAAGAAGATA TCCTTTCGTT AAATTCACAC CTGAGCGCGA AATCGGTAAT GACTTACTAA 180
 TCGTTCAAaA TCTATCTAAA aCGATTGACG GTGAAAAAGT ATTAGATAAT ATTTCAATCA 240
 CAATGAATCC AAATGATAAA GCAATTTTAA TTGGGGATAG TGAAATTGCG AAAACCACAT 300
 TGCTTAAAT ATTAGCCGGT GAAATGGAAC CAGACGAAGG TTCATATAAA TGGGGTGTA 360
 CAACGTCATT AAGTTACTTC CCTAAAGATA ACTCAGAATT CTTTGAGGGC GTTAATATGA 420

GCGGCTTCTT AGGCCGTATG CTATTTAGTG GAGAAGAAGT TAAGAAAAAA GCTAGTGTAC 540
 TTTCAGGTGG AGAAAAAGTA CGTTGTATGC TAAGTAAAAT GATGTTATCA AGTGCAAAC 599

(2) INFORMATION FOR SEQ ID NO: 896:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 1057 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 896:

TCATTAGTAG AAATCGTTAA AGATGCATCT TGCAATTTAA AATCCGAATC TTTGTATTGT 60
 TTGTTACACAC TATCTACGTT TAACAATGTT GTCATATCCA TGCTCCTCTT TGTTTAATTT 120
 TAATAAAAAC GTCTTCTCTT CAATAAATAA CTAAAGGCGT TATATATGAA AATAGCAATG 180
 ATAAGTAGCA AACTAAAGCT TTGATTAATT CCAGTAGTAA TTGAATAAAG CCCAATTACT 240
 ACAATGGCTA GTATCAATAT TGATAAGTTG ATCGCATATG TTTTAAATAA TGCAATTAAT 300
 TCTATATGGC GTTCACCTTC ATCCAATATT TCCAATCGCT TTTCAGTGTA ATTCTTATCT 360
 GCAATTTTTG GTATTCTGTC ATCAAACCTT CTATTAAACA GTGTAAATTG TGTATTGAAA 420
 ATAGCACTAG CAAAAAATGG TATTAAAAAG AATAGTATTG CATTTGCTGC AGCGTGCCCT 480
 ACCACAAAAA TAAGCAATAC TAAAAAGCA ATAAGTGTCT GCAGAATACT TAATATACTT 540
 CCATTTAAAA CATAACGATT CGCAAGCAAC TCATATTGAT CTGTTGCATC GATATCTACC 600
 TCTTTATCTA CAAGTTGCTT ATACTTCAAT GCACGTCTTT GATTCATCAA AACAATGGCT 660
 TCTACCAATA TGATAATAAT CGTCGCAACA ATCGATATTA CAACGACATT GTTATATGTC 720
 GCAAACGTCA AGTTCTCAAT ACCAAATCCA TCAAATTAC CTAAAATTCC ACCTATGATA 780
 CCCCCTACAA GTCCACCCAG TAAAGATAT CCGATATATC TTAGTATTTT CATGCCTCAT 840
 CCTCCTCAAT AATAAAAACA GTTYCCACCG TTTCATTGAA AATGCGAGCA ATTTTTATTG 900
 CCGTTAATAC TGATGGCATA AAATTGTTTC GCTCAATTAG CGATATGGTT TGTCTTGAAA 960
 CGCCCCGTTG TTTAGCAAGT TCGGTTTGGT TTAAGCCATC TCGTGCTCGT AATTCTTTCA 1020
 ATCGATTACG CACATCGCAT CAACTCCnTA ATTACAC 1057

(2) INFORMATION FOR SEQ ID NO: 897:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 336 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 897:

5 AAATTATTGA GTTAACAAAT CATTACGGAG CACATAATTA TTTACCATTG nCAATTGTCA 60
 TTTcAGAAGC CGAnGGGGTA TGGGTAAAG ATCCTGAAGG CAATAAATAT ATGGATATGT 120
 GAnTGcATA TTCCGCTGTT AACCAAGGTC ATAGACATCC GAAAGGTATT CAAGCATTAA 180
 10 AAGATCAAGC TGATAAAGTG ACTTTACTCT CACGTGCTTT TCATAGTGAT AACTTAGGTG 240
 AATGGTACGA AAAAAATTTGT AACTGGCAG GTAAAGATAA AGCTTTACCA ATGTAATACA 300
 GGTGCTGTAA GCAGTAGAAA CAGCTTTGAA AGCAGC 336

(2) INFORMATION FOR SEQ ID NO: 898:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 302 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 898:

25 TGnTgntTTC TTATTGTTGA CCAATTATTT TGCATACCAA ATCCAAATCA TGTATTTATC 60
 AATCACATCC TAATGCTAAA TCCAATGTAT TACATTGTTT AATGGTATAG CACAATCTAT 120
 30 CATATTTGGT ATATCAAGTA TGGAAAACAT TCCATATCAT TTTTACTTTA TTTTATTCTT 180
 ATGTTTAATA GCTGCAGTAA ATTTTCGTATT AGCAGGTATA CGACACACGG CAATTTATAA 240
 TAAAACATCT AAAGTGACAC AACTGATAA TCAACAGGGA GTTTCAAAGA TAGTCAGACG 300
 35 GG 302

(2) INFORMATION FOR SEQ ID NO: 899:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 469 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 899:

CCACTAGCTG ATACAGTAGG TATACCAAGA TTCGTCATCG TTACGACATA TCAATTTGGT 60
 50 CAATATGCGA TGTTATTCTT AGCGCCGACT GGAcTTGTTA TGGCCACACT ACAAATGTTA 120
 AACATGCGAT ATTCACATTG GTTCCGATTT GTATGGCCGG TAGTTGCTTT TGTATTGATT 180

TATAAAAAAT ACTAATGGGG TTTTATGCAT CTCGTAGGTT TGTAGAAATA CTAACTAAG 300
 CGAGGTGCAT TATTATTTTT GATTAAGAAA ATAATGACGG TAATGATAAC ACTAGTAAGT 360
 5 AATTGATACA ATGCTCTATT TAATAATGAT ATTTTAAAAA TTTGTTTTTA ATGTAATGTT 420
 AGATCTATGG TATATTATAT TTAACGTGGT AAATATGTAT TTGCTGTAA 469

(2) INFORMATION FOR SEQ ID NO: 900:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 821 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 900:

CTTTATTGGT AACTCTCTAT aATATtTTaA CATTTTTACG CTATCGTGCA AACGCAAcCa 60
 CTTTGAATTy TCTGATATTT TTAGCATATA ATTTACACCC TGCACGATGA ATTGTTAATC 120
 CAGTTGTATA AATATCGTCA ACGAGTAATA TTTCCCTACC ATTTAAATCT AATTCCGTAT 180
 25 CAATAATAAA TGGATTTTCA TCTGCCAGAC GCTCTTCTT AGTTAAATGA GACTGTTTTG 240
 GTCTATTTGA CATCTTTAAA ATCTTATCaA AGCGAATCCC TTTAGCTTTT AGTACTGCTT 300
 CTACCGGGTT AAATGTTCTA GATAAATCAT GTGCCGGCGA AGAAGGAATT GGCACAATAT 360
 30 AGTCATAAGA TGTTTGTGGT ATTTCAATCA AATGTGCCAA TAATTCACAT AAATAATAGT 420
 CTTTCAAAAA TTTATACTGA TGTATCATCT CTTTCATTAA ACCGTCATAT TGAAATTGAC 480
 AATATAATTG TTCCATTAAA TTAAAGTGTG CCGATAGAAA CTTGCAGTCT AAACAATACG 540
 35 CTTCATCTTG ATTTAAGTGT TTTAAGCACC TTGAACATCG CCTTGCTTTA ATATCAAGTT 600
 TAATATTGTC CCAATTCTCT TTGCATCTGT CACATAATCT ATTAGGTTTC TTGAACAAAT 660
 TATAAATGGT TATATTTTCA TATACTTAG CACCACAACCT CAAACAATTA TTCATCAATC 720
 40 CAACCTCTTT TTAATGCTAA TTTGTTTCATC CTTTGAATCT CTTTTTTAGC TTGAATCATA 780
 TTCATACTTA CCCCTTnCAT GAAAAACAA TACTTTTTCC A 821

(2) INFORMATION FOR SEQ ID NO: 901:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 349 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

TGATGCTATT AAAAAGTTAA TTGTGCGGTC TGTTTTGATA ATTTTAATAA TAACTTCAGG 60
 TAACTAAAAA TCCTAATATT GAAAAACAA AGCCATTTAA AACATAACCT AGTATATTCC 120
 5 ATGTATGATT GTAACCTATT TGCCAGTnT GTACTGACTT GCATAATTCT GTCACGTnCG 180
 AACCATGTAC AAGCCTGCAA CTACTGCTGA ATGATTCCTG ATGCGTGAAC AATTCAGCAA 240
 TTAAATACGT AACAAATGGT GTTACAATTG AATAATTGAA ACATATTAAT GTTTCATATC 300
 10 CTCGACGnCA TCAATGTTAA TCCGGACCTT ACTAATGCAT ACCTATAAG 349

(2) INFORMATION FOR SEQ ID NO: 902:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 390 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 902:

CAAGTGGTAT AAATTTACCT GGTGAAATGT AGGTCGTGGT GGCGATGATA CATTATTCGC 60
 25 TAAAATCGAC GCGTTGTGA AATTCGAACG TAAAGGTCGC GACAAAAAAC AAGTTTCTGT 120
 ATATGCAGTT AGCTGAATAA TTTTGTCTAG TTAACACCAG AAAGTGAATC TTCTGGTGTT 180
 TTTTACTTTT TATAAAATGT TTTTCATTAT TATTTTCATT ATGnTATTTA AAAATGGGGA 240
 30 TTTTAGACGT TATACTAAAT GTGCACTGTA TAGGGGCCCT AATCACTAAC TATAGGGGGA 300
 CAAGGATACA GTGCAGCGTT AAGGATAACT GnCCACATTG GTCTGGGAAT ATAGGATTTA 360
 AGCAAGGTTA TAAAGTACTC nTAGGCCCTA 390

(2) INFORMATION FOR SEQ ID NO: 903:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 334 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 903:

GGAATAGACG TATATGCGCG TTGAATTTAA TCCTAATAAG CTTTCGCATG ATGAAGTGCT 60
 TTGGTTAAAA CAAATATCA TCAGTTATTT GGACGATGTT AGTTTTACGA GATTAGATTT 120
 50 GGCTTTTGAT TTTGAATTTG ATTTAAATG ACTATTATGC ATTGTCAGAT AAGnCGGTAA 180
 AAGAACTAT ATTTTATGGC CGAATGTAAA ACCAGAACAA AATATTTTGG TGTnCGAATA 240

GATTCACATT CTATGCGGTG GAATTGATTA AACG

334

(2) INFORMATION FOR SEQ ID NO: 904:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 334 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 904:

CAAGTTGGGG ACACTGTTTC AAATGAAACA ACAGTGTGTA TTTTAGAGGC AATGAAACTA 60
 TTTAATGAAA TTCAAGCAGA AATTTTCAGGT GAAATTGTTG AAATCTTAGT AGAAGACGGA 120
 CAAATGGTAG AGTATGGCCA ACCGTTATTT AAGGTGAAAT AATGAAAAAG GTTTAATTGC 180
 AAACCGCGGT GANTCGCAGT TAGGATTATT CGCGCTTGTC GTGATTTAGG CATCCAAACT 240
 GTTGCATCTT TCTGAGGGGA TAAAGATCGC TACATCTCAA ATGCTGATGA GGCATATnCG 300
 TGGGCCnCTT GTCTAAGGTC ATATTTAATA TCCG 334

(2) INFORMATION FOR SEQ ID NO: 905:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 399 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 905:

TTCACCCTGT AATTCTTaAC CGTCAATTGA CCTTTATGCA GATTTAATAT TCCTAAAACG 60
 TATAACTCTT CTAATGATAA TTGACACATA TTAAATAAC ACTTTAGATT CCGCAATAAT 120
 TCTTGTGACG ACAATAAATA CGATACATAG TCACAACTAA AATCAAATGT ATATTGACCA 180
 AAATAACGTT CAATATAGTC ACTAAGCTCA TTATTCATAT ATTCTATTTn ATCTATATGC 240
 ATTTTATTAA TCGAAATAGT CAATTTACGT TGATCCCTTT GATCTCTTCC TTTCAATAGC 300
 CATTGATGAT TGnTAAATA ACTTAACATT TGAAGAAGGG CCATCTTAGA TTGGATTTCT 360
 TTCATnTTA ATAAACTATC TATTGAAGCG CTATTGGAA 399

(2) INFORMATION FOR SEQ ID NO: 906:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 1478 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 906:

5 TACATTTTTC AATTATGCG AAAATnCACa ATTTTCATCG AAATATTTTG TAnAnAATCA 60
 TTGCTAGGTG ATGAGTTATC TCGGTTAATT ACAAACGAT ATCTAAGTTT AAATATTAGA 120
 TCATAAAAAA ACTATCTACT GAATATCCCT CCATAGCATC ATTTTCTAA GCAAAAGTTA 180
 10 AACTTAGTTA GATAAAATGC AAATGAGATT ATTGTAGATA GTCTCTTTTTT AATGTTTAAA 240
 AATGATTAAT GCCaTAAACA TAAATAATTC CaAAGAATGC CGCGCCACTA AGCACTGTTA 300
 ATATAAGACT TAGTAACAAT GTGCGTTTAT AATGTTTaAC AAATGCTaATG AACAAAATGA 360
 15 CTACATTATA CGCAAAGAAA AGTCCGAATA ATGTCATTGT TATTTTCAAA TCAGAATAGA 420
 AAATATTTAA TAGTAATACA ATGACTGCAT AAATTAAATA CGGAATAACT ATAAATTTGC 480
 GTTCAAATCT TAATTGTTTCG AAaCGtTTAT CTTCGTTTGT CATGATATGC TCCTTTATGA 540
 20 TTTAAAAGTA AATAAGTTTA CGGAAtATCT TGTCCGaTAA TAGCGGTGTA AAtGTCAAAC 600
 CACGACTGAT CATCtAAATt AAGTkGTAGC CctTCGATTG CTTGATCAAT ACGCTTTAAC 660
 TGACTTGTTT CAAGTATCCG GCATGATACG ATGCGGTATT TTTACTAACC ACGCTATCAT 720
 25 CACAGCTGTG TCACTyACAC mATATTTGTC AGCTATTGAT TGAACAACtT TCATAATACG 780
 TTGCGCTTTA ATATCTTCCT TGTCGAAAAT TTTACCGCCT GCAAAAGGAC TCCAAGCCAT 840
 GATTTGAACA TGGTTTTGAT ACATTGAATC CATTGTTCCA TCTTGTA AAC TATCAACGTG 900
 30 ATATGGCGAT AATTCTAATT GATTGATGCT AATATGTAGT CTTTCTTTCA TAATATATTG 960
 ATTTAACAAT TGGTATTGTG AATGATTAAA ATTTCGACACC CCGAATGACT TCAACTTACC 1020
 35 TTGTTTAAACA AGTTTAGTTA ATGCATCAGC AACTTGTTCT GGaTCCATCA ATGGTGaAgG 1080
 ACGATGAATG AGTAGACTAT CTAAATAATC TACATTCAAA TTGATTAAATG ACTGTTCAAC 1140
 AGATTTTCAG ATGTGCTTAC TACTCAAATC ATAACGATGT CCATTTGTAA AATCAAATTG 1200
 40 CTTAGAAGGC AAAATGATAC CACATTTCTG AACAATTTGA ATTTTATTTC TTAATTCGGG 1260
 TGATAAATCC AAAGCATTAC CAAACAGTGA TTCACATTGA TAATCTCCAT AAATATCAGC 1320
 ATGATCCATC GTTGTAATTC CACGTTCAAC TAATTCATTT ATAAAATAAT TTAACCTTTT 1380
 45 CGCAGTCATC TTCCATTTCAT TTGCACGCCA AAAACCTTGT ACAAGCCTAG AAAAATGAAC 1440
 ATAGTGATTA ATCATTATTT GTTCCATATn TCATCCAC 1478

(2) INFORMATION FOR SEQ ID NO: 907:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 543 base pairs

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 907:

	TTCTATGAGA ATAGATATTG TTAAATTAAG AAAGTAGTCA ATTTTATTAT GACAAAAGAA	60
10	AGAAGAACAT TTAGTTCAGA GTTTAAGTTA CAAATGGTTA GATTATATAA AAATGGTAAG	120
	CTTAAGAATG AaATTATACG AAAGTATGAT TAAAAACCTT CAATTATCTC AAATTCGATA	180
	AAACAACACC AAAATACTGG ACCCTTCAAT CATCAAGATA ATTTAAAAAG TGATGAAAAA	240
15	GAGTTAATAA AATTACGCAA AGAAGTTCAA CATTTAAAAA TGGAACATGA TGTTTTAAAG	300
	CAAATTTTAA AGTTGATTTA GAACTGAAC TTTTAAAGA TACATTACTT GAAGATTCTA	360
	ATTTATCTGA TTATATAAAG AACCAACTTC CAACGATATG GAGAGACTAA GAAATAGTTT	420
20	AAATTTATTT AATTTCAATA AAAACTCATA ATAATATTTA AGTAAGTTAG ATTGCTTTTA	480
	GCATTAGGAA TTCGCTTATA ATTAGATGTT CAATATAGAC TTTTTTACAC ATACATGAAC	540
	TAT	543

25

(2) INFORMATION FOR SEQ ID NO: 908:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 751 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 908:

	TTTnCGGTnG AACATGATTn CGATATTACT TCTAAAACGA TTCAACCAA ACCAGGAGAA	60
	AGTGTGGAC GTTTAGTTAA TGTCGATTGT AAAGATACAG TACTGGAGTA TTCAGAATTA	120
40	GATCCAGAAG TTGCAAATCA ATTTAACAAT GCTAATATCG GTATTCATGC ATTTAAACTT	180
	GGTTTTATTT TAAACGCTGT AAATCGTGAG TTACCTTATC ATTTAGCTAT TAAGAATTTG	240
	AAGCAATTAG ATGAGAACTT TGGTGTATT GAACAACCAA CTTTAAATT CGAATTGTTC	300
45	TATTTTGACA TATTTACTTA TGGAAGTAGT TTTGTCACGT TACAAGTTCC TAGAGAAGAA	360
	GAATTTTCAC CTCTTAAAAA TAAAGAAGGT AAAGATAGTG TTGCAACTGC AACAGAAGAT	420
	TTACGTAGAA TGGGTTTAAT TTAATGATAG GCGGTGACTA TGATGTCCAA ATCAACTAAA	480
50	AAAAGTAATG ACACAATCGT AGAAACATTT AAGGATATCA TCCCTTTATC ATTTGGAGAA	540
	GAAATTGGTA ATGCGGCATC TCATGGTGTT GCAGCTTTGT TAACATTATT AGTGTTACCC	600

55

TATGTTATTT CTATCTTTAT GATGTTTATT TCATCTACTA TTTATCATT C TATGCAAAAT 720
 GAAACACCTC ATAAATATAT TTTAAGGATT A 751

(2) INFORMATION FOR SEQ ID NO: 909:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 394 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 909:

AAATTGTCAC AATTCAGTCT AATTTAAAAG GAAGTTAATT ACAAATTAA AAAATCATGC 60
 ATCGTGTCAT TTAGATATTG AAAAGATGA GTCAAATTTG TTTTCATATAT TTTCCAATAA 120
 CAAATTATTA TATCTAAATA TACAATCAGA AATATATGAA TAGAAATATC AATAAGAAAA 180
 ATAATATGAT TAAAAATGAT GAATGGCATA CTTATAAAGT GTCTAAATAT TGGCGGTCAA 240
 TATTACTTAC AAACACGAAT GTTAAGTAAT GTAGACAATG cTGaAAAAAC AATaAGTAGa 300
 AACTCTATAT AGAATGTTTCG TTTTATTTT TaATAATTGa ATAATCaTTA TTGGGTGGAT 360
 TTTAATATGG nATTCCGGTC GGCACACGGA TTAC 394

(2) INFORMATION FOR SEQ ID NO: 910:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 1022 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 910:

TAAAGCTAAG AAAAAAGAAA AACGTAAAGC TTATAACCAA CGAATGAAAG AACGTAGGAA 60
 AAATCAACCT AGCGCAGTTA GTCAACGTCG AATGAATTTT GAAGAGCGAC GTCAAATTTA 120
 CAACAATGAT ATTTCTGAAG AACGCAATTC AAGTGAAGTT AAGGACAAAA AAGAGCAAGA 180
 ATAAATATTG ATGATACCCA GATTAGTAAG CAGAGGTCTT TTGCTTATTA ATCTGGGTTT 240
 TTATATGAGG TTAATTATCG ATAACGTTTA ATTAAAGTGT TTAGGTGTCA TAATTTTAAA 300
 TGACGATTTC CCCATTACKA TACACCTAAA TtATCATCAA TCTGaATTCA GATGTTTATk 360
 ATAAAAATTA GATGAAAAAT ATGTTAATAT ACAAGkAaTT TAATGTGcGk ATATCTATAG 420
 GCTCGTAGTA TACTTATTAA AATATTAAAC AAAGAAAGGA TTTTAAGATG AATAGAAAAC 480

GGCTATCCTA TTTTCTTTA AAAAGTGGTA ATGCATCACA ACGTGAAGAA TTAGCGAAGC 600
 AATTATCTCA GAACGGTGGC AAGGTTTCTT TAGATATGCT TCAGACAACA ATGGGTGCAT 660
 5 TAGCAATTAT TTTATTAATT TCAACACTTT ATGGTATATT TGCACAAATT TGTATTAAAG 720
 GACGTAGAAA ATTATCGATT ATACTTTTTG TTATCGCGAT AATTGTAAGT TTGATGGCTC 780
 10 TTAATTTAAT TGCAATTGTC TTATGGGTTA TCGTGATGAT TATGTTGATT TCTAAAAAAG 840
 AATCAAAAGA AACAACACAT AAGGACGATG AGTATATTTA TCATTAATAT GTTCATAGCA 900
 AAAGAAAAAC CATTAAAATG TTAAGTTGTT AATTATTAGA TACAACCAAC ATTTTAATGG 960
 15 TTTTATTTTT AACTTTGTAG TTCTTGAAT GTTTGAACGA TTAAATAGAC ATTTAAATA 1020
 CT 1022

(2) INFORMATION FOR SEQ ID NO: 911:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 274 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 911:

GGTACTTTAT TTTTATTTTT GGTCTTAGTG ATTTTACAT TATTACATA TAAAGCGCCT 60
 AATGGTATGC GTGCCATGGG TAGCATTAGC TAATGCAGCA ATCGCAACAT TTTTAGTGGA 120
 AGCATTTAAT AAATATGTnG GTGGCGAGTA TTCGGTATTA AATTTT TAGA AGAGCTAGGA 180
 35 GACGCTGCGG AGGTCTAGGT GGTGTCGCTG CCGCTGGATT AACAGCATT GCTATCGGTG 240
 TGTCACCAGT ATATGCATTA GTTATAGCAG CCGC 274

(2) INFORMATION FOR SEQ ID NO: 912:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 679 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 912:

CTTTAATTGT TCACTTTATC ATTATTATCA ATCAACTCTA TGATATGAAA TTGTGTTAGA 60
 GATAAATCTA GTTCCTCATT TTCCTTTTTA TACTGTCTTC TTTTATCGGC ATTTTCTCTT 120
 TCTATAATAA ATTGTTGTAA TTTTAAATA ACTTCTCTCT TCATATCCAC TATTATTCCT 180

TTGTTGTAAT TAACATATAT TTAAGTAGTT ATGCACCAT TATTCCGCAT TTCACAAATC 300
CACCTATAAT ACAAACATATC ATTTTAAATA AGCAGAATTT ACCCTGTCTT CCACACAAAT 360
5 TGTTCGAC ACTTTAATGT GCCTACTATC CAAAAAGTT ACTCATAACA AATTGCGCAT 420
TTTAATAAAT GTAGCAATGC CATTTCATG CTGCAAAAT ACTCGTATTC ATATTTATGT 480
TTTATATTAT TAAAGTTTTT TAAATCCATA TTTTATAAC ACTTGCTATG TGATAAAATT 540
10 AATTTATAT ATAAATCTT AAGATTCAGA TTATTTAATA GCAAAGGAGA TAGTGATATG 600
GATGTTTTAA CAATAGAACA TTTAACAAG AAGATAGGCA ACAAACGAT TCTCGAAGAT 660
15 GTATCATTTA AGCTGAAAC 679

(2) INFORMATION FOR SEQ ID NO: 913:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 564 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 913:

GCCATCCTTC AGTGCTAATT TTTTCAAATT CTAATGCAGA TGCACCACTA ACCATACCAT 60
30 ATATAAAGAA AAAGACCACG AAAGnAATAA GTAGTAGTAT AGATGCACAT ATCATAATGA 120
CATTGGAGTT TTCAGCGCCA AATTTAAATG TCAATGsGAA AATGATAGAG TATGCCCCTA 180
TGATACCAAA ACTCATTAAA CCTGACATAA TACCAATCAT CACACTTTGG GTCACAATCG 240
35 TAGTCACAAC TAATCCAATC ATTAACTTG CACCGAATAA GATTAAATAA AAGGCAAAGT 300
ATGACTTAAT ATAATCACTA CGTTTAACCG GTAAAGTAGA TACATAATAC ATCCATCTTG 360
AGTCTTTTTC aTGTTTAATA TTATCAGTAA TAGGTGTGAT TAACATAACC CCAGCCATkG 420
40 CCGAACTCAT CAACGGATTA AATACTGCAA AGTATCCTGC AGCTATAATA GCGACTATAA 480
AATAAATATA TGTTCGnTT CTCGTTGCAT AAAAATACT TAGGAACATA CCTTTCATTA 540
45 TACTTCACCT CGCATTATGA TTTT 564

(2) INFORMATION FOR SEQ ID NO: 914:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 643 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

AAAGAAGAAG CAAGTGCAAA TAATTTAAGT GATATATCAC AAGAGGCACA AGAGGTTCAA 60
 GAAGCTAAAA AAGAAGCACA AGCAGAGAAA GACAGTGACA CATTAACTAA AGATGCAAGT 120
 5 GCAGCAAAGG TAGAAGTATC AAAACCAGAG TCACAAGCTG AAAGATTAGC AAACGCTGCA 180
 AAACAGAAGC AAGCTAAATT AACACCAGGT TCAAAAGAGA GTCAATTAAC TGAAGCGTTA 240
 TTTGCAGAAA AACCAGTTGC TAAAAATGAC TTGAAAGAAA TTCCTCAATT AGTTACTAAA 300
 10 AAGAATGATG TATCAGAGAC AGAGACGGTT AATATAGATA ATAAAGACAC TGTTAACAA 360
 AAAGAAGCTA AATTTGAAAA TGGTGTATT ACACGTAAAG CTGATGAAAA AACAACTAAT 420
 AATACAGCTG TTGACAAGAA ATCAGGTAAA CAATCTAAAA AAACAACACC TTCAAATAAA 480
 CGAAATGCAT CAAAAGCATC TACAAATAAA ACTTCAGGTC AGAAAAAGCA ACATAATaAG 540
 AgATCATCAC mAGGTGcAAA GaAACAAAGT AGTTcmAGta AGTCaACTCA AAAGAATAAT 600
 20 CAAACTAGTA ATTAAGAnTT CAAAAACAAC AAATGCTAAn TCC 643

(2) INFORMATION FOR SEQ ID NO: 915:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 915:

AGGTTTAAGG GAAAAATCCT ACCTGGAGAG ATTCAAAAAC TAAATGGACT ATTTCCAAAA 60
 35 ATAAAGGGCA ATCAGATGGT GGTTCCTTATT GGAAGTTAAT AAATAACAAA GGAAAAAGAA 120
 TAGCTTCTTT AACTAAAGAA GGAAAAATCT TAAGGGAATA AGGTGTTGTA AATTATGTGC 180
 TTTGATATAA ATAATTTGGA TATAAAAAAG TTGAATTTTA GAAAGGTAAA AAACGCAATT 240
 40 CATTTAAGTT TAAGTGGCGA TAAATACCAG TTTTGGAGG ACGGTAAAAC TATCAATAAT 300
 ACTTATTTTT TAGCTGTATA TGATAATGCA ATAAACATTT TTGAAGATTT GTTTtCGCCT 360
 tCTGATTCTA TAAATTTGGn TCATGTAGTA TATGTTTATA 400

(2) INFORMATION FOR SEQ ID NO: 916:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

CCCAAAGTTC GATAGTGTAT TAGTATTATC TTAATAAAAT GTTAGGTACA ATAAAGATGA 60
 TTATATATCG GAGGTTAGTA TAAAAATGTA TGTAGATCGA AAACCATCAC TATATTTAGA 120
 5 GGATTTGCGA CATGATTTTA AAAATAGTTT AAGTAAATTT GAAAATGGTG ATGAAGCATT 180
 TGATACGTTA TTAGGTTTCG TAGAGTTAGA TCATATTTAT TCGTCAGCAC TAAAGGAAAT 240
 10 AAGCACTAAA CTGAGTATTT TAGATGACAA TTTCAATCAC ATTTATAWAC ACAATCCTAT 300
 ACATCATATG GAGCGACGTG TGAAAGAAAT GCGTAGTTTA ATAGAAAAGC TTAATCGTAA 360
 AGGATTACAG ATTAGCGCAG AAAC TGCCAA AGAACATATA 400

(2) INFORMATION FOR SEQ ID NO: 917:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 917:

GAAAATTACT ATGAAGATTG CATTAGGATG CGACCATATT GTTACAGATA CAAAAATGCG 60
 TGTATCTGAA TTTTAAAT CAAAAGGACA TGATGTCATT GACGTAGGAA CATACGATTT 120
 25 CACAAGAACA CATTATCCAA TTTTGGTAA AAAAGTTGGC GAACAAGTTG TTAGCGGTAA 180
 TGCAGACTTA GGTGTTTGT TTTGTGGAAC AGGTGTTGGT ATTAACAATG CTGTAAATAA 240
 AGTACCGGCG TTCGTTTCAGC ACTAGTACGT GATATGACAT CAGCGTTATA CGTAAAAGAG 300
 30 GAATTAAATG CGAACGTTAT TGGCTTCGGT GGACGTATTA TAGGTGAGTT ATTAATGTGC 360
 GATATTATCG ATGCCATTAT TAATGCTGGA TTATAAACCC 400

(2) INFORMATION FOR SEQ ID NO: 918:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1220 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 918:

GTCTCCAGCC ATTWCACCAC ACATACCTGT CCATTTACCT TCTTTATGTG ACGCTTCAAT 60
 AACTTGTTTA ACTAAACGTA AGATTGAAGG GTTATATGGT TGGTATAGAT ATGATACACG 120
 CTCTGACATA CGGTCAGCAG CTAATGTGTA TTGAATTAAA TCATTTGTAC CGATACTGAA 180

	GATTCCTAAT TCTATATCAT CCGAAATGTC ATGACCTTCA TTTTAAAGGT TTTCTTTTTC	300
	TTCTAATAAT ATAGCTTTAG CTTCTCTAAA TTCGTAAATT GTTGCAACCA TTGGGAACAT	360
5	GATATTTAAC TTACCATAAA CTGATGCACG TAATAATGCA CGTAGCTGTG GTCTGAAAAT	420
	ATCTTGTTGC GCAAGGCATA AACGAATCGC ACGGTAACCT AAGAATGGAT TCATTTCTTC	480
10	AGGCAAGTTT AAGTATGATA ATTCTTTATC TCCACCTATA TCTAAAGTAC GTACAACAAC	540
	ACGTTTACCG CCCATTGCTT CTAATACTTC TTTATAAGCT TCAAATTGTT CTTCTTCTGT	600
	AGGCATTGG TCACGACCCA TATATAAAAA CTCAGTTCTA TATAAGCCGA TACCTTGTGC	660
15	ACCATTTTCa ATAACACCTG GCAAATCATT AGGTGTACCA ATATTTGCAG CAAGCTCTGC	720
	GTGAACACCA TCAACTGTAA CAGTATCAGC ATCACGTAGw TTTTGTAATT CTTTCTTGTC	780
	AGCAAAATAA CGCTCACGTT TATCTTGATA AGCGATTAACT TCATCTTCAG TTGGATTAACT	840
20	GATTACATCA CCATTTAATC CATCTACGAT AATCATGTCTG CCTTGTTTAA CTTCTTGAGT	900
	AATTGATTTT GTACCAACAA TTGCTGGaAT TTCTAAAGAA CGACTCATAA TTGCAGAGTG	960
25	aCTTGTTCTT CCGCCAATGT TTGTAGCAAA ACCTTGACG AATTCTTTAT TTAATTGAGC	1020
	AGTATCAGAT GCGGTTAAGT CATTCCCTAC AATAACAACG CTTTCATCAA TCATACTCGG	1080
	ATTCGGTAAT TCTACACCTA AAATATGTGA TAACACACGT TTAGAAACGT CGCGAATATC	1140
30	AGCCGCACGT TCTTTCATGT ATTCGTTATC CATAGATTCA AAAATTGTAA CAAATTGTGT	1200
	TGThACATCC GCTTAATGTG	1220

(2) INFORMATION FOR SEQ ID NO: 919:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 315 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 919:

45	TTAGATTGAC TGCAAAATGCC GACTCAAAAG AACAAAGCACA ATCATTGATT CAACCTGTTA	60
	AACAAGAAAT TCTTGATCGT ATTGGAGAAT ATTATTATGG TTCAGATGAC ACATTAATTG	120
	AGCAAGCTGT AATAAAGAAA ATTCATGAAC CTTTGTAAT ATATGATGGT ATTACTAATG	180
50	GTGCTTTATA TCATCGATTG AAAGAAGTGG ATTTAAACGA TGTTCTAAAG GGTATGATTA	240
	ATCACAATGA AAACTTGTt GATATTAATa AACCTATTGA GcAGCAATTA AAAGATGCAG	300
	TGCAATTGT TAATA	315

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 433 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 920:

ACTTTGTAAA CCTACAAATG TAATGAATAA TCCTATACCT GCTGAAACAG CCATCTTCAT 60
 TTGATAAGGA ATTGCATTAA TAATAACTTC CCTAAACCCT GTGACGGTTA ATATCGCAAA 120
 GAATATACCT GAGAATAAAA CGCCTGTAA ACCAACTTGC CAAGGAATAC CCATGGTTAA 180
 CACAACAGTA AATGCAAAGA ATGCATTTAA TCCCATACCT GGTGcTAACG CAATTGGATA 240
 TTTAGCTATT AGCCCCATGA ATAGCGAGCC TACAAATGCT GCTAATGCAG TCGCTACAAA 300
 AATGGCACCT TGGTCCATTT TCATATCTTC TGATACGCCT TTAACACCTG CTAAACTTAA 360
 AACTTGCGGG TTAAGTGCTA AAATATAGGC CATAGATAAG AAAGTTGTGA TACCGCCTAA 420
 GATTTCTCTT TTA 433

(2) INFORMATION FOR SEQ ID NO: 921:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 439 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 921:

CTATTTTATT TGTATAGCGC TTGATGTAAA GTTATTTTAG CTGTCATACT ATGTGCTAAA 60
 CCAAATTCAG TTGTGTCATA TCTTCGCTTT TTTGTCAGT TTATAATAGG TATAATCGGA 120
 TATAATGAAA AGGkGAGGGA GGATTCAAAA TCGTAGGTT ATTATATTCA TTTCTTTTTT 180
 ATATGATCAT AGGTTTATTT AGTGGCTTTT TCTATAGAGA GCTAACAAAA GCATATGATT 240
 TTACTGGTAC AACACAATTA TCACTTGTTAC ACACACATAC ACTTATTTTA GGTATGTTTA 300
 TGkkTTTAAT ATTATTACCA TTGGaGAmGT TATTTAAATT ATCAAGTTAC TACTTATTTA 360
 ACTGGtCTTC TATGTATATA ACATAGGTGT TATCGTTACT ATAGGTATGA TGGTGACAAA 420
 AGGATTCCTC CAAGTCACT 439

(2) INFORMATION FOR SEQ ID NO: 922:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 474 base pairs

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 922:

	GTAATATCTA TATACGTATA TTAAATGAT ATATCTGGGT ATTTTCTTTT TAATAGCGGC	60
10	TGTAGCCAGT CATAAATATC TtTCGaTGTT GGCGCATTAA CGCAACTTGC ACATATAACA	120
	TCTGCCCCAT AAACCTACCAC ACTCACGTGC TCCATATATT TATCCCCCAT TGGTTTGATA	180
	GATTTTTTATT ACACTATCTA TTATAATATA sTmATAAAGA TTATCAAATT CATCTCTCGA	240
15	AAGGAGACTT GCCTGATGCC TACTGAAGAT ACAACGATGT TTGATCAAGT AGCAGAAGTT	300
	ATTGAACGTC TTCGTCCATT TTTATTACGT GATGGTGGCG ACTGmTCATT GATTGACGTG	360
	GAAGACGGTA TTGTAAATTA CAATTACATG GTGCATGGTG GnACATGCCC CAAGTTCTAC	420
20	AATCACTCTT AAAAGCTGGG TATTGAGCCG TGCATTACAC GAAGAAGTGC CTGG	474

(2) INFORMATION FOR SEQ ID NO: 923:

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(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 554 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 923:

	TCAACTTGTC AAGAAAATTT ATTAACCTTA GTAACCTCTC CAACAAAACC TTGTGATGTC	60
35	ATCACAGCCA TATTTGAAGT TATACCTGAT TTAGATCCCT TATCAATTAC AATTGTATTC	120
	ATCCACTGAT CCGGATTTCT TGCCAAAACC GTAGTAGAAA TAGGATCAAA TTTTGAAATA	180
	TCTTTTAAAT CAAGCTCTTT TTTTAATTTT TCATTTTCCG CTTCTAATTG TTGGTTCTTA	240
40	GATTCTAACT GGCTAATCTT ATTTTGTAGAT TCTTTAGAAT CTCCTTTTTT AAAAAAGTCC	300
	CCAATCGTAC CAGCAACAAA ATTAACCTGGA TAACTCACAA CTCGTTGTCC AAAAGACACA	360
45	GAATCACCTA TATATTGTTT AGGAGGTGAT TGAGATTGTG AACGTATGGA CAGCCCAATT	420
	AATGCAATAA AAACGATAAT TGCACATAAA ACAACAATTA ATTTGGTATT TTTAAAAAAC	480
	TTAAGCACCC AGAACACCTC TATTATGTCA nAATATTGTA TATCCTTTTC TAATTnATAT	540
50	TACTCCCAT ATTGA	554

(2) INFORMATION FOR SEQ ID NO: 924:

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(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 575 base pairs

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 924:

	ATCTTTAGGC ATTAAGCAAG TTTATGTAGA AGACTTTGAA CATAAATCCT TTAGCAAAGC	60
10	TAAAAAAGCC TTAGAAGAAA AAGGGTTTAA AGTTGAAAGT AAGGAAGAGT ATAGTGACnA	120
	TATTGATGAG GGTGATGTGA TTTCTCAATC TCCTAAAGGA AAATCAGTAG ATGAGGGGTC	180
	AACGATTTCA TTTGTTGTTT CTAAAGGTAA AAAAAGTGAC TCATCAGATG TCAAAACGAC	240
15	AACTGAATCG GTAGATGTAC CATACTCTGG TAAAAATGAT AAGTCACAAA AAGTTAAAGT	300
	TTATATTAAA GATAAAGATA ATGACGGTTC AACTGAAAAA GGTAGTTTCG ATATTACTAG	360
	TGATCAACGT ATAGACATTC CTTTAAGAAT TGAAAAAGGA AAAACAGCAA GTTATATTGT	420
20	TAAAGTTGAC GGTAAACTG TAGCTGAAAA AGAAGTCAGC TATGATGATG TATAAATATA	480
	ATTGAAGTAA ATGTACCGAG GTTCTATTTT GGAAGTCTCG GTATTTTAT GTTGGAGATT	540
25	GCGGTAGTTT TAAAATGCnT CnTGTCnTCA TATAC	575

(2) INFORMATION FOR SEQ ID NO: 925:

(i) SEQUENCE CHARACTERISTICS:

	(A) LENGTH: 307 base pairs
30	(B) TYPE: nucleic acid
	(C) STRANDEDNESS: double
	(D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 925:

	AAAAACGCTG CTGAGTTTAA AAAGCAACAA TTAAATGAAC AAGGTATTTT CAAGAAACCA	60
	GTGATTACAC CTATTAAACC ATATAAAAT TTCTATCCAG CTGAAGACTA CCATCAAGAT	120
40	TATnACAAAA AGAACCCCGG TACATTATTA CCAATATCAC CGTGGGTCAG GTAGAAAAnc	180
	GTTTATAGAT CnCATTTGGGG GGATCCAAAG CTTAAAAAGA TAAAAGTGAC TACCAGATAT	240
45	AGATATATTG TTACACAAGA AACGGCACTG GACCACCATT TATGAATGAT ATTGGACCAT	300
	TTGCTAA	307

(2) INFORMATION FOR SEQ ID NO: 926:

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(i) SEQUENCE CHARACTERISTICS:

	(A) LENGTH: 400 base pairs
	(B) TYPE: nucleic acid
	(C) STRANDEDNESS: double
	(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 926:

5 CTCTACGCAC TCATTCAGAT ACACACATTG CGCATTGCTC ATAGAATCAG GTGTACACAT 60
TAAAGAAATA CAAGAAcGAT TACGGCATAA AGATATCAAT ACCACTATGA ATATCTATGC 120
TAAAATCACA AATTCATACA AAAAAGACGC CTCCCATAAG TTTAGTCACC AAATGGAAGA 180
10 CGTCTCGTAA TTAAAATATA TTTGCGTGCA TTCTAATTTA TACTTAGAAT GAATCATACT 240
CGTGCCATAAT GTAATTTTCT AGTTAGTCAA AACTATAAAC AGTTTTACAT CATTCTGCGC 300
ATGCCACCCA TGTTAGGTTG GTCATTATTT TTTTCTGGAA TTGATGCTAC AACCGCTTCA 360
15 GTCGTTAAGG ACATTGCTGC AACACTTGCA GCAGTTGnAA 400

(2) INFORMATION FOR SEQ ID NO: 927:

(i) SEQUENCE CHARACTERISTICS:

- 20 (A) LENGTH: 809 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 927:

TTTAGGTGGT TTTAATnGTT ATGGTCATTC TGGACACCTA CTTATAATAA AATTTCAAAT 60
30 CAAACTGAAC nTTTTGTACC GTTTGATTAA ACTCAAATTT ATTAGCTCCG TATTTAAATT 120
TTGGTTGGGC TATATTCGTT TCGGTACTTA TTTCAACACC GTTTTTATAA ACTCGGAAGC 180
TATCATAAAC AATTcTGTCT CCAGCTTTTA GTTTGATCCC TTCGATTTTC ATTATTTTCAG 240
35 CATGCGTTAA ATTCCATACA AACGATTCTG TATCTTCGCC TAAAATAATT GTTATCTTTT 300
TATACATGTT GAATTGGTCG TTAGGAGCAC TACCATGATA GTAAACTGTA CCTTTGCTCA 360
AATTTTCAAA TGTATACTTT CTTTGTCTC CGCCTGCATG CCAATCAATA TTAAATCAA 420
40 ACGACCACAA TCCAACCTTT TTGTTTTCTT CTAACTCTAG GCTTGTTCCA ATACTTTCAC 480
CGTATGGTAA TTCTGTAGTT TCGAATTTTA GTTCAAAAGA AACTTTATTA CCTTTTTGTT 540
TAGGGTTTAT AACTCCGTTA AAAATAACTT TATACTGTTT ACCATTTACA TAAATTTGTT 600
45 GATCGTGTCT TGAATATTCG TAATCCGGGA AGTTGTTTTT ATCTAATTTT ACGTAATCAT 660
CAGAAGTTGG TTGAGTAAAC CTGTAATTCA ACTCTTCTTT TCTTCTGATn TCTCGCAAAT 720
50 ACATAGGTTT TATGTCTGTC GTTAACGAAT ACAACATATC TCGCATATAA GCAATGTCTG 780
AACGATTTTT AACTTTACAA AAACAAGGA 809

(2) INFORMATION FOR SEQ ID NO: 928:

(A) LENGTH: 1016 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 928:

10 nAAAACTATT ATCGCATCTA CaGTaATCGC TGCAGGTCTT TTAActCAAA CTAATGATGC 60
 TAAAGCTTTC TTTAGTTATG AATGGAAAGG TTTAGAAATC GCAAAAAATT TAGCAGATCA 120
 AGCTAAAAAG GACGATGAAC GTATTGATAA GTTAATGAAA GAGTCTGATA AAAATCTAAC 180
 15 TCCTTACAAA GCTGAAACTG TTAATGATCT GTACCTTATT GTTAAAAAAT TAAGcCAAGG 240
 TGATGTGAAG AAAGCAGTTG TCAGAATTAA AGATGGTGGT CCTAGAGATT ACTATACTTT 300
 TGAActAACT CGTCCTTTAG AAGAGAACAG AAAAAATATT AAAGTTGTTA AAAACGGTGA 360
 20 AATCGACTCG ATTACTTGGT ATTAAAAAAC ATACTGAATT AAATAGTTGT ACGCCAAACG 420
 TTAGAAAACA ATGCTAACGT ATTGGCGTGC TTTTTTATTT TAAGTAACTT CCAATTTATT 480
 TAGCATCTTT ACGACTGTTT AATAAAGCAC GTATGATTAA CACGGTTGCC ACTATATCCG 540
 25 TTACAATTTT TATGATTGTT AATACATTCG ATTTCTTTT CACAATAGCC ACCTCGCTTG 600
 TTCAAAACAT AAACAActAT TGCAATCACT TTAAAGTAAT TATTTATATT ATTTATCCCA 660
 30 ATAAGCTCAC CATTCAAATA AACACAATAT TATAAAATAA TTATACCTTT GGATATAGCA 720
 AAAAGCCACA CTCTATAGCA TGGCTTCTAT CAATTATTTT AAAGTATTAT ATTTTAAAC 780
 TAGATCGATT TGTCTTTGTA ATTTTTTCTT TTCATAACTG TGTTGGAAAT GAATTAAATT 840
 35 AACAGCTCTT TGTGCTTTAC GGTGTGTTGC AACAGTTCTT GTACGTTTGA AAAAGTTTAC 900
 AGCTTTTTGT GCATCCACAA CTTTTtAttT TACTTGwTTT kTAAAGTTTG TTGATACTGA 960
 TCATATTTTT TAGCAGCTTC ACCGTThTTA GTTGTGCATG AGATCACCGG CAACCG 1016

40

(2) INFORMATION FOR SEQ ID NO: 929:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 929:

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AAATGAAATC ATACCTAAAA GAGATATTAT TACAGAATCA ATGATTGTG ACTGTATTCA 60
 AAATGCAGGT ATTGATTAG AAGTATTTAA AGACGACTTA CAAAAAGTA AACTAACCGA 120

55

CGTTTTCTTT AGTGAAGATG TTCATGAAGA AGGTTTAAAA GTCGAAGGAT TATACCCATA 240
 TCACATCTAT ACTTATATAA TTAATGAATT GATGGGTAAA CCTATCGAAA AGAATCTTCC 300
 5 TCCTAAATTA GAAACTTATA TACAGCAACA ACAACTTGTA ACGATGGAAG AATTACTTAC 360
 TATTTATGAA TGGCCAGAAA AACTTTTAAA CAAAGAGTTA 400

(2) INFORMATION FOR SEQ ID NO: 930:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 930:

20 TATTTCTGAC ATGTATCATG CTCCTTCGTG CTTTATTCTA ATGTAATATA CACAATTATA 60
 CATTGAAATT CAAATTTGTG AACACATTGT GAACTGACAT AAATTATACA CAATTTTATA 120
 GCGCATAATG TTTTAAAAAT ACACATTATA GCAATTATAA TTAAGTTCAT TGTGTTGTCA 180
 25 TCAAAAAAAG AAAAAGGTGA TGTTTTAAAT GGATACAGTT GAATCAGTCG GTTTTGTACA 240
 GCATGACTTA GCAGTTCATA TCATTTTGCA ACGATGGTGT GGTATGCTTA ATGTCGCAAT 300
 TCAGATTTTA GGATCGCAAA ATGACTCATA TATAGCATGC CAAGTGGCAA GTATCATACG 360
 30 ACATGGnGTG TCAGGCATAn GGCTCATACT GTGCAATATG 400

(2) INFORMATION FOR SEQ ID NO: 931:

- (i) SEQUENCE CHARACTERISTICS:
 35 (A) LENGTH: 543 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 931:

CCAATCAATG TTGCCAATGG ATCACCTAAT GACAACCAAG TAATTGCTAC CATAGTAACT 60
 45 GCTGTTTTAA TTTTACCTAA TTGACCAGCT GCACTTACGA ATCCTTGTTT AATTTGTAGT 120
 AAACGTAAAC CAGTTACGGC AAATTcTCTG GCAATaATAA TGATTGCTAC TACAGAATTT 180
 GTTAGTCCTA GTTGACAAG TACAATTAAA GCACTTGCAA CTAATAATTT ATCCGCTAAT 240
 50 GGATCCAAAA ATTTCCCCAT ATTTGTAAT AAATTCCATT TTCTAGCTAA ATAACCATCA 300
 ACAAATCGC TAAGGGAAGC CAATATAAAA ATAAACCAC TGATTAAATA CTCAATTCTT 360

ATAAAACTG GTATTAACAC TACTCTAAAA ACCGTAATCT GGTTCGGAAT ATTCATTATA 480
 CATCCTCATT TCTCACTAAT TTATTTCTGT TAAAAATATT AAAACTAACC ATGATCCATA 540
 5 ACC 543

(2) INFORMATION FOR SEQ ID NO: 932:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 932:

GATTGCGAAT GAGATTAGTG GGATGATACC GGTAGAATGG GAGCAAGTAT TTACAATAGC 60
 20 TTATGTAAC TATCAAGCTG GAGAAGTCAT CTTTAATTAT ACTAAACCAG ATAGTGATGA 120
 ATTAAATTAT TATTCAGmCA TACCTAAAGA TTGCAATGTC TCAAAAGATA TTTTTAAGAA 180
 TTCATGGTTT AAAGTTTATC GAATGTTTGA TGAGTTAAGA GAAACTTTTA AAGAAGAAGG 240
 25 GCTTGAACCA TGGACATCAT GCGAATTTGA CTTTACAAGA GATGGCAAAT TGAATGTATC 300
 TTTTGATTAT ATAGATTGGA TAAATACAGA GTTTGATCAA TTGGGCCGTC AAAATTATTA 360
 TATGTACAAA AAATTTGGGG TTATACCAGA AATGGAATAT 400

(2) INFORMATION FOR SEQ ID NO: 933:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 759 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 933:

ATTTTTACAA AGAAATAGTA GTCTTATATA TCTTAACATT TAATAACTAA ATCAAACATA 60
 TTTTGAGCCT TTTTTTGAAA ATTAACATTT TAACCTTTTT GATTTTACAA CAAATTATAG 120
 45 CTACGTATTG AAAATTAAAG CmTTGGtTTA AGTGTTGTGT TAAAgyTTT TATGTTTAGA 180
 TTGTTATATT ACTATGTATT CTTAAATTTG TTTAAAAAAT TAATGCTTTA AATTGATGTA 240
 TAATGGGAAT AAGAAATAAA TAAAAACGAC CCGCACGATT AACGTACGGG TCCACTACTA 300
 50 AAGGGAGTCA AATTTTTACC TcGTTTGTAT CATGCAGCGT TTTACACATA CTTTTAAGAG 360
 ATGTTTATTC GTTATCGAAG GTACACCTTT ATTATAACTT ATATCATTTT TATTAAATA 420

ATAATGATTA TTAAATAGTA ACTAAATACA AAATTACATG GGGTGAATGA TAATGAAACA 540
 ATACTTAATT ACTGGTGGGA CTGGTATGGT TGGATCTCAA TTAGTTAATG AAATTAAAAA 600
 5 ATCAGATTCA CATATCACGA TATTAACGCG ACACGACCAA ATTTCAAATG ATAAGAAAAAT 660
 TTCATATGTC AACTGGGCTA AATCTGGGTG GGAACACAAA GTTCCTCAA ATATCGATGT 720
 GGTCAATCAAC TTAGCAGGTG CTACATTGAA TAAACGATG 759

10 (2) INFORMATION FOR SEQ ID NO: 934:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 15 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 934:

GATCAAGCTG GGGAAGTCAT TTTTAATTAT ACTAAACCAG GTAGTGATGA ATTAAATTAT 60
 TATTCAGACA TACCTAAAGA TTGCAATGTC TCAAAAGATA TTTTAAAGAA TTCATGGTTT 120
 25 AAAGTTTATC GAATGTTTGA TGAGTTAAGA GAAACTTTTA AAGAAGAAGA GCTTGAACCA 180
 TGGACATCAT GCGAATTGTA CTTTACAAGA GATGGCAAAT TGAATGTATC TTTTGATTAT 240
 ATTGATTGGG TGAATTCAGA ATTTGGACCA ATGGGAAGAG ACCATTATTA TATGTATAAA 300
 30 AAATTTGGnA TTTGGCCTGA AAAAGAATAT GCCATAAATT GGGTTGnAAA AATAAAGnTT 360
 ATGTTAAGAG CAAGnTTGAG CTGAACTATA GGGGAGATAA 400

35 (2) INFORMATION FOR SEQ ID NO: 935:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 345 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 40 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 935:

45 CTGAATATAA TTTTnCAAC TACATCTCGT TTATTAGACA CCGTGCACTG ACTAAGAAAA 60
 TTTCTCTTGA CTCCATTAGT CCTGACGAAT ACTAACATTT AACTACCTTG CTCATCGATA 120
 GAAACAACCTT GTAATGTTAA TTCCCTTAT TTTCTTAGTT TTAATCTATC AGCGATTAAT 180
 50 TCGATTGCAT CTTTTTCATA AGCAATTGGA TAACTTGAC CGCGGTACAC CTAACGCTCG 240
 AAATATGATT TnTATCGTC ATAATCTAAA ATATTATnGG CAAAATCACA GCAGTTTTCA 300

(2) INFORMATION FOR SEQ ID NO: 936:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 619 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 936:

GTTATCATCA TCTTCTGAAG TATCATCTTG CCCATCGACT TGACTTGCAT CAGTTCTCTT 60
 TAAATCATCA AACTCTGGAC TAGCTAATGT ATTATATAGT GTTTTAGGTA AGTAATAATA 120
 TTCGTTTAGC ATATCTTCTT TTAAATATC ATCTACTTGA TACATAATTC TTTGAGCCAG 180
 ATACATATTA TCTTCAGAAT TTTGATTTTG GAAAAAATTA GGTAAATATA AGAACATATT 240
 TACTAAAATA TCATCTAAAT CTGAATGTAT AGATGGTATA TCAAAGAAAT CTTGGCTTAA 300
 AAATGCATGT TCTAAATACA AAAATAATAA ATCTGTATAT TGTGTTTTAG TACGATACAC 360
 TTTAATTTGA GATTCCGTAT ATGATATACG TGTATCTAAG CGAAGATCAA TTAATTTAGC 420
 AGTACTTGGG CGCTCAACTT TAATAGAATT TAATACGCGC ATATCTTCTA ATAATTTAAA 480
 AAGTTGTTGG ATAAAATTTA GGGcGTTTAA AAGTTTTATC TTGtACTACT TCATTTACAA 540
 TTTGtACATC CaTCATATGA TAACCGTAAG CAGCTAACAT AACATCTGTT TTTAAACCAG 600
 CCATTTTCGAT ATGGCTTGG 619

(2) INFORMATION FOR SEQ ID NO: 937:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 615 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 937:

TAATCCCTTT CATAATGGGC ATCAATATCA TATTAATCAA TCTAAAAAAC TTACAAATGC 60
 TGACGTTACT ATTGCAATAA TGAGTGGTAA CTTTGTCTAG CGTGGCGAAC CAGCAATCTA 120
 TAATAAGTTT ACTCGTGCAA AAATGGCATT ATCAACAGCT GATTTAGTTA TCGAACTACC 180
 AGCAACTGCC AGTTTATCAT CTGGcGATCA TTTTGCCGAA CTAGCAGTTA AAGTCGCnGA 240
 TTATATGAGT GTCGATACAA TTGCATTTGG TAGTGAAAAT AATGAtATCA AAACATTAAA 300
 rCmATTAGCA CACAGCATTA ATGaAATTGA mCAATCTGaA TCCTTTTCAC aAAAAGTrAA 360

AAGTCCTAAC AACATACTTG GTATTAGTTA CCTGAAAGCA ATTGCTAAAA ATGCTAAAAA 480
 CATCAATGCA ATTTCTATCA AACGAGAAAA TGCTCAACAT CATGATTCAT TAATTCAACA 540
 5 CCATCAGTTT GCAAGTGGTA CATCTATTAG AACATCAATC ATTAGTCAAG ATGATCATTG 600
 GCATCATGTG GTACC 615

(2) INFORMATION FOR SEQ ID NO: 938:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 938:

20 AGAATTGAAG ATGGTAAAGT TTCAAAATAT CATTCGGTTA TCATAAAAGA CGCACAAGCA 60
 ACTTCACCAT ATTCAATTTT TATCAGAGGT GCTATTTATC GCTTTGAACC ATTAGTATAA 120
 ATATACGTAA GTGCTATGAG CGAGAATGCC CATATGAATA ATGACAAGCA CAATGGAAAG 180
 25 AATCGTAATA TATTATTTAA TCGTGATGCT TAATTAAAAT GAAAAAGATT GATAATATAA 240
 ATGTGAAAAA GTAAGTATAC CCGTAACTA AAGTATTCAC GGTGAGAGGT GCTCATGTCA 300
 TAATGATGCA CGTGTCATAA TTATAATAGC TTAAATATGT CCATACAACA CCATGTAGAT 360
 30 ATGCATATAC AGGGTATGAT AGACATAGnG TCTGnGAAAT 400

(2) INFORMATION FOR SEQ ID NO: 939:

- (i) SEQUENCE CHARACTERISTICS:
 35 (A) LENGTH: 466 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 939:

GTACAGGTAT GATTGGTGAT CCCATCAGGT AAATCAGAAG AACGTGTGCT ACAAACAGAA 60
 45 GAACAAGTAG ATAAAAATAT CGAAGGTATT AGTAAGCAAA TGCACAATAT TTTTGAATTT 120
 GGAACAGACC ATGGTGCAGT GCTTGTTAAT AATAGAGACT GGTTAGGACA AATCTCATT 180
 ATTAGTTTTT TACGTGACTA TGGTAAACAC GTCGGCGTTA ATTACATGTT AGGTAAAGAT 240
 50 TCAATCCAAA GTCGTTTAGA ACATGGTATT TCATATACAG AATTCACATA CACGATTTTA 300
 CAAGCTATTG ATCTCGGTCA TTTGAATAGA GAATTGAATT GTAAGATTCA AGTAGGTGGA 360

GTAGATAAGC AAATGATTAA TAGTTGAGGG GTATGTCGAT GAAGCG

466

(2) INFORMATION FOR SEQ ID NO: 940:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 329 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 940:

ATGAATCACC CATTGATACC AATCATTTAC ATCACTGTCA TACGAACATA TATTTAAATA 60
 GAAAAAAATT ATTTTAAAGA TTATAACTAC TCTTAATCAT TTTAGTGAAT TAAAAAAGT 120
 AGTGCAAAAA GCAAAATATA CTTTATACAC TACAAATCAT TTATTTATAA TAAAGTTTCA 180
 CCAAAAAATG TTCCAATAA TGAAACCGCT TGTCAGCAG TATGATTATn ACTGTCAATC 240
 AATGGATTTA CTTCAACTAA ATCCATTGAG GAAATTAAAT GTGATTGATG CAGTAATTCC 300
 AATGCnAAAT GGCTTTCTCT ATnACTAAG 329

(2) INFORMATION FOR SEQ ID NO: 941:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 315 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 941:

CGATATAGTA CCAATTTATT TGAAGAAAAA TCCGAACTTC AAATTTCCGA TGAAGCAAGA 60
 TATACCGGTT ATTATGATTG GACCAGGTAC TGGAATTGCT CCTTTTAGAG CATATTTACA 120
 AGAACGTGAA GAAGTTGGTA TGAAGTGGAA AACATGGTTG TTCTTTGGTG ATCAACACCG 180
 TAGTTCTGAC TTTTATATG AAGAAGAAAT AGAAGAATGG CnTGAAAATG GAAACTAACA 240
 CGCGTAGATT AGCATTTCCA AGAGnCCAGA CACAAGATAT GACAGCCnCG ATATGGAGAA 300
 GTAACGTTCC ATGAT 315

(2) INFORMATION FOR SEQ ID NO: 942:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 699 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 942:

TACCAATAAT CAACTTGTTT TACATCATCG TGTGTTTCAA TCACTTTCCT TTTTATACCT 60
 5 TTCTTACCTT TAAAGAATGC ATCAACATCT TTTATTGAAG ATCCTTTTGA ATCTTTAGTA 120
 AATCTATAAT CTGCAAGTTC CACTTTACCC ATTAATTCTT TGTAATCTTT CCATCCTTGA 180
 ATCCCTTTAC TATTCGTAAA CGACTTTTCT GTCATTAATG GATCCAACCT ATCAAGAGAT 240
 10 GGCGCATCTT TAATTCCTTT CATTTTCTTC TCTATTTCTT CATATTTCTC TAAATCTGGA 300
 TCTTTCTCTT CTTCGATTC TTTTTTACA GTTCTTGTT TTGATTCTTC TGATTTCTTT 360
 GATGATAATT TATGATTCCC ACCAAAAGAA CAACCTGCTA CGACTAAAAG CATAATTAAA 420
 15 AGTAAACATC CCAGTGTCTT TTTCATAAAC TTTCTCCTCT TAAGTTATTT TGTTTGAATC 480
 AAATAACAT ACATAAATTT AAAAACTTA TTTATATTGa TATTTTACAT TAACCATCAA 540
 20 TATTTTTAAA TACTTTAAWt GaTAATTTAA GAAAATTGTT TTGTCTAATA ATTTAAGTAG 600
 TTAAAACATA GATAGATATA AAATAGTTTA TAGCCATTAA TTTATAAGTT TAAAATTCGC 660
 ACTATTTCAA TTTGCCATTT AAAAATAGTT TGTTTAATC 699

(2) INFORMATION FOR SEQ ID NO: 943:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 943:

CGCTCCATAA ATCAACAATG TTCGAGTCTG TAATCTAGAT GATAAAACGC CAAGAATGAT 60
 CATAAATGGC ACTTCTAAAc CAGCACATAA ACTAGCTAAA TAACCGACAT GTTGTTTATT 120
 40 TTCTTTTAAA TAATCAGTAA CAAATAAAGG CATATTCATC GTATACATCC ATTGTCCAAT 180
 GTGTAATAAA ATAAATGCAA TAAATGGTAA TAAAAGCGTT TTGTCTTTAA ACATATTAGG 240
 AGCAATTTTT TCAACATGTT GTTGCCTACT AATAGGGTGT TTAATGTTTA AATCCTTATA 300
 45 GAnAAACACT TGAAGTACTA AAGTAAATAA AATGATACTT ATTGGGCCAC CAAACAATCC 360
 AGCATAGCCT TTTAATCCGA TTAATTGGGC ACCAATAAAT 400

(2) INFORMATION FOR SEQ ID NO: 944:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 570 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 944:

5 AAGATGACAA TACTTTGTTT CAAGAATTGA AAAAAGAATT AGAACAATGG GATTTTAATG 60
 TTGCTGGTAT TGAAGATTTT GGCAAAGTAA TGGATACATT TGAAAGTTTT AATCCTGAAA 120
 TTGTTATATT GGATGTTCAA TTACCTAmAT ATGATGGGTT TTATTGGTGC AGAAAAATGA 180
 10 GAGAAGTTTC CAACGTACCA ATATTATTTT TATCATCTCG TGATAATCCA ATGGATCAAG 240
 TGATGAGTAT GGAAGTTGGC GCAGATGATT ATATGCAAAA ACCGTTCTAT ACCAATGTAT 300
 TAATTGCTAA ATTACAAGCG ATTTATCGTC GTGTCTATGA GTTTACAGCT GAAGAAAAAC 360
 15 GTACATTGAC TTGGCAAGAT GCTGTCGTTG ATCTATCAAA AGATAGTATA CAAAAGGTG 420
 ATCAGACGAT TTTCCTGTCC AAAACAGAAA TGATTATATT AGAAATTCTT ATTACCAAAA 480
 20 AAAATCAAAT CGTTTCGAGA GATACAATTA TCACTGCATT ATGGGATGAT GAAGCATTTG 540
 TTAGTGATAA TACGTTAACA GTAAATGTGA 570

(2) INFORMATION FOR SEQ ID NO: 945:

25 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 1241 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 945:

CCGAGnCCAC CGTTCCAAAG TCCATTTTTTA TCCCCATCCC TCTCTGAATT GAACTATAAT 60
 35 TTTTGAATTT ATTAATAATG CTATTTTTnT TATTTTATCA AAAACTGATT ACAAATACAC 120
 ATAGAAAATG AAATATATTT TTCTTTGACT ATACATAACT GTTATTTCTT TGGATATTTA 180
 40 TATTAAATGC ATTGGTAGTA GTTGTAGCGC ATTAATGTTT GACGGTGTAT AGTATTAATT 240
 ATATTGAAAG TTAGTTGGAA GTTGATAGTA GGAGTGGGAG CATTGAAGCG ATTTGTGGCG 300
 ACGGTATTAT TATTACTAGT CTTTATATCA GGaTGtGGTA ATGrTaAATA TGTGAAAGAA 360
 45 ATaGATGAAG CAGTTAAaAT TCAAAATCaA AAACAAGAAC ACTTGCCCAa AAAAGGCAAC 420
 GGTGATCGTG TTGATCATTT TGAACGCAAA GATGCTAATA TTTATGTCTA TGATAAGGAT 480
 AAAATTATCA TTTTAGCTTA TAAACCTTTG AGTAATGATG ATGAAGTGCA TTATTATGCA 540
 50 TATGATTTTA GTGATAAACG TGTATCATAT AAGCAAGATT TTGATTCGAG ACGATATTAT 600
 CAACAACATG ATGCGGATTA TCATGAAGAA AATATGACGA ACTAGATATG AATAGGAGTT 660

55

GGTAAAAAAG AATCAGCAAC GACATCTTCG AAAAACGGCA AACCATTAGT TGTCGTATAT 780
 GGCGACTATA AATGTCCTTA TTGTAAAGAA TTAGATGAAA AAGTCATGCC AAAGTTGCGT 840
 5 AAAAATTATA TAGATAATCA CAAAGTGGAA TACCAATTTG TCAATTTAGC TTTCTTAGGT 900
 AAAGACTCAA TTGTTGGTTC GCGTGCGAGT CATGCAGTAT TGATGTATGC ACCTAAATCA 960
 TTTTtagatt TTCAAAAGCA ATTATTTGCT GCCCAGCAAG ATGAAAATAA AGAATGGTTA 1020
 10 ACAAAGAAC TATTAGATAA ACATATTAAC CAACTGCATT TAGATAAAGA GACGGAAAAT 1080
 AAAATTATAA AAGATTACAA GACAAAAGAT AGCAAGTCTT GGAAAGCTGC AGAGAAAGAT 1140
 15 AAAAAAATAG CGAAAGATAA TCATATAAaA aCGACACCAA CTGCATTTAT TAATGGCGAG 1200
 AAAGTTGAGA TCCATATGAT TATGAAAGTT ATGAGAAGTT A 1241

(2) INFORMATION FOR SEQ ID NO: 946:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1057 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 946:

TAATACAATG ACACCATTTA GCATGACCGT TATCCCTGTA ATTCAGCTGA TATTATCTGT 60
 30 TGCAATTTTA TGTGACGAAC TGTTGCACTT AATTTGATAA ATCnACAAAT ACAAAAAATC 120
 TAAGTTGAAC AATTATGATA CAACCGTGCA AACGATATGT AGTATAACTT GTCAACTTAG 180
 35 ACTTATTGAT AAATATATTA ATAGTGGTTT ACCATAGCAG GAGATTTTAC aTCaAAATTT 240
 TGAAGTAGCG TATCaATCTT TGaATCaTCa ATATATACcT TATGTAAATT TTTCaTATAC 300
 ATCGAATGAG AAAGTGCTTC aTAATTTAAT GAAAAAGATA TATGATCTCC AACTTGATAG 360
 40 TGTCCTTGAC CATTTAAATC AAGCATTAAA TGATCACTCG AAGCGCCTAA AATATTGATA 420
 TGCTGATCCA TAGGTGAAAT ATTATCGACT TTTGTayCTA AATAACCAAT ATCTACAATA 480
 GCTTGTAAGA ATGATTCATG CGTTTGTGTA TTAACCTGAG GTTTAATTTT TAAATCTCA 540
 45 GCCTCCAATG TAATCGCATC TTGATATAAC ATAGCGATCG CTTGATTTGT CGTTGTATCA 600
 ACACCTCTAA ACAACGTTTC ACCTATTCGC AATTCATTTA TTTTACCCAA ATCATTATAT 660
 AAAAGTTGTG GTAACATGCT CGAATTACCA CCTGAAATAA TTTTCAATCG ATATCCTATT 720
 50 TCTCTTTCAA CAGCTGAGAC GAATCGATTA ATCATAAAGA TATCATCATC ACTTGGCGCA 780
 TCAGATTTAA AACACATAAA ATTGAATGCT AAACCTACAA AATGGATATT TTTCAAGTGA 840

CAATCTACCA TTAATAAAAT CTTATGTTTT TTTCCTAAAA CTTCTGgCTA CTTCAATTTAT 960
 TTGATGTATG GGTAGATAAT TCCGGTTTGG GATACCTCCA TATCnAACCT TTTTTCCTAA 1020
 5 TCAATATCCT GGAAAAhCCC TTTTTTTGGG CAGGGCG 1057

(2) INFORMATION FOR SEQ ID NO: 947:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 649 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 947:

GATATCCGCT CGATGAATAT ACCTTTAAAG GTGTTGGTGC AAATTCTGAA CAATTAAGTG 60
 20 CTATGAATCA TGATTCTTTA AAAAAGGAGT ACATTTCAAA TGACTGTAA ATATAATCAA 120
 AATGGCGAAT TAACAATGGA TGGTATTAGT TTAAAAACGA TTGCACAAAG CTTTGGTACA 180
 CCTACCATTG TTTATGATGA ACTACAAATT aGAGAACAGA TGCGCCGTTA CCATCGCGCA 240
 25 TTTAAAGATA GTGGATTAAA ATACAATATT TCATACGCCT CAAAGGCATT TACTTGCAAT 300
 CAAATGGTCA AACTTGTAGC TGAGGAAGAT TTACAGTTAG ATGTTGTTTC TGAAGGTGAA 360
 TTATATACAG CTTTAGAAGC AGGTTTTTGAA CCGAGTCGCA TCCATTTCCA TGGTAACAAT 420
 30 AAAACGAAAC ATGAAATTAG GTATGCTTTA GAaATAATA TCGGTTATTT TGTTATAGAT 480
 TCATTAGAAG AAATTGAATT rATAGACCGC TATGCTrATG ATACGGTTCA AGTTGTATtA 540
 CcGAGTTAAT CCcAGGTGgT TGrAAGCcAC mTrCaCaCgA aTTTATTCaA ACyGGGcaaG 600
 35 AAgGATAGGT TAAAGTTTTG GGATTAAAnCC nnTTTCCCAT TAATGGGCC 649

(2) INFORMATION FOR SEQ ID NO: 948:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 472 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 948:

TACAAAGCTT AAAAACAGAG CTTAGTyTCG TTGAACCATT AATTAGCCGC TTAGAATTAG 60
 50 AAGAAGCTAA TGATAAACTA GCTAATATCA ATGATAAGTT AGATGACATG TATGATTTAA 120
 TTGAACATGA AGTTAAAGCT AAAAATGATG TCGAAGAAAC AAAAGATATC aTTACGGATA 180

AAACTACTA TATAAATGAA TCTGATGCTC AGAGTGTTTCG TCAATTTGaa AATGrAATTC 300
 aAAGTTTAAT TTCTGTATAT GATGATATTT TAAAAGaAT GTCTAAATCT GCTGTGCGAT 360
 5 ATAGCGAGGT TCAGGATAAT TTACAATATT TAGAAGATCA TGTCACAGTT ATTAATGACC 420
 AACAAGAAAA GCTACAAAAT CATCTGATTC AATTGCCGTGA AGATGnGCAG AA 472

(2) INFORMATION FOR SEQ ID NO: 949:

- 10 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 949:

20 AGAGGATCCC AGGCGTTTGT TGATCCAGCA GCCGATnCAG AATACATCTT CTATGCATAT 60
 AAACGTTTCA ATTTCGAATT GAAAGATCCA AACTTCACTA GTGAAGAAAA TATGTTTAAA 120
 GATGTATCAG ACAAACCATT AATACCTGCT CGTAAAGCTC AAATTACAAA TGCGAACTAT 180
 25 AAACGACATG GTATGAAGTT GATGATTCTT GGAATGACG AACCATATAA CAATGAGTTC 240
 AAGAAAGATG ATCGAAAATG CGAAGAATGA GAAATTTCAA AGGTGCGCAn GTCAAGCCAT 300
 GTGTCAGGGG GGCATATGAT TTCnGGTCAT CAGTAAGGAC TGTGTCATGC CATGGCCATC 360
 30 TGTTGTACnG ATCTCTAATA GAATCTCAGA TGCCCGGCAA 400

(2) INFORMATION FOR SEQ ID NO: 950:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 556 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 950:

AAAATCTTCG ATGACAAAGA AATCTAATGA TGTTTCTTTA AAATGACCAA ACTGCAACGG 60
 45 AATGATATAA CCACACTTGA GATATGGCGC TTCTTTTTTC AACTTAGTCA TCACATCATA 120
 ATCCAAAGAC ATCACACGAT ATTGATGTTC AACACCATGC TTTTTCAAAA TATCAATAAC 180
 ACGTTGTGTA TAATCTGCTG GTTCTTTACC ATGTGGCTTT AACTCTACTA GTAGCTTCAC 240
 50 ATTTGATTGT TTAGCCGTTT CAATAAATTC GTCTAAGGAT ACAAATTTTG CTTCATGTCC 300
 ATTTTGACGC ATTTTCAAAC CGACGATATC TTTGAAATTA GATTGAGAAA TATTTTTATT 360

CATAATTGTA TCTAACTCAA CGTATTCGAC ATTCGCTTTT GCAGCAGCTT TCAATGACGG 480
 AATAGAATTT TCAACACCTT TATCTTCGAA ACCACGTGGC CAATAATGGA GATATTGTAA 540
 5 TTGATAGTAT TATTGG 556

(2) INFORMATION FOR SEQ ID NO: 951:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 469 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 951:

TTGTGGTAAT GATGTTAATC AGTATATTTT TACTTTTGAC AATGACATCT AAAGGATTAA 60
 20 GCAATCTTAG AGTAATAGAT GATGAGGCAA ATATCATTTT TTTTATTACT GAATTGAATT 120
 ATATTAAGTC GCAAGCTATA GCAAATCAAG GATATATCAA TGTTAGATTT TATGAAAACA 180
 GTGACACTAT TAAAGTAATA GAGAATAATA AAATACGATT TCTAAAATTA AAAGTAGGCA 240
 25 AAATAATTAA TGTTGCAAAA GTTGATATTA TTGCCTTTGA TAAAAAAGGG AATATCAATA 300
 AATTTGGTAG CATAACAATT TACAATAACA ATTCAATTTA TAGgAATAAT ATTCCATATT 360
 GaAAAAGGcA AGAATTCGTT ATGAAAAGCT ATAAGTGTA AGGTTTCATT TTAATAGATA 420
 30 GTATGGCTGG nTTTTTGCCA ATTGGGATTG nATTACATTA CTATTGATT 469

(2) INFORMATION FOR SEQ ID NO: 952:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 730 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 952:

ACATnTATAA TnCTTATTTG CTTGCTCCTT TCACTTTTTA AGAGTAAAAA ATAACCTGAA 60
 45 ACATAACTTT AACATCCAAG TTTCAGGTTA GTGTAATGTA AATGATTTAC TTTGTTnTAT 120
 TATGATTAAA CATCTAATTC TCTGCTTGTA AGTGCTTTAA TCATCTCTGG ATCAGCATGT 180
 GAGAAAAAATT GGCTATTACT TTCTTCTAAT GTCGCAATTT GTTGTTTATC TTCTTCTGTA 240
 50 AGTTCAAAAT CAAATATATC TAAGTTTTGA GCCATACGTT CTGGATTTAC TGATTTTGCG 300
 AGTACAACAA TGTCACGTTC TACTAACCAG CGTAAAATAA CTTGTGCAAT TGATTTGTTG 360

AATGGTGCCC AAGCTTCTAC CACAACATTT TCTTGTTGAA GTGCTGCAAC TTGTTCTTCT 480
 TGTGATGGA ATGGATTAAT TTCTATTTGG TTCACTTGTG GTTGAATTTG ATTGTGAATA 540
 5 CCTAAATCTA CAATTCGATC AACGCCGAAG TTAGATACAC CGATTGCTTT AAaTTTTTACC 600
 ATTTTCeTTT AACTCCTCCA ATGCACGCCC ATGGAGCCAT ATACnGCCAT TGGTAAAGGT 660
 TGGGTGGAAT nAAGCACCTA GGATCCAGGA TAGGTCCCAA ATTTTAATCC GGTGGGnAAT 720
 10 GGATCGGTTT 730

(2) INFORMATION FOR SEQ ID NO: 953:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 953:

ACAAATGACA ACGTACAATG ACGTCTTCAC AAACATGCAT TTAGGAGAT TGATTATTAC 60
 25 AAATATCCAG TTTTTTGTTA CATCTATTTG CAAATCTGCA CTTATTAACG TGAAATGCTT 120
 GGATTGATGG CACAATTCCT TCTATCGTTT CAAGTCGTTT CTGCTCTTCT TTAAGTTTTG 180
 GAATTGTTGA TAATAATTTT TGGGTATAAG GATGTTTCGG ATTGTGTAGT ATTTCTTTTA 240
 30 TGCCTCCAAA TTCTACAATT TGACCTGCAT ACATAACTAA GACTTTATCG CAAAACTCAG 300
 CAACTACACT CAAATCATGT GTAATCATCA TAATTGCCAT TTGCGTTTCC TTTTGCAATT 360
 35 CTTTTAATAA GTCTAATATT TGCGCTTGAA TCGTGACATC 400

(2) INFORMATION FOR SEQ ID NO: 954:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 251 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 954:

TAAATCTTGA GGACGTTTGG TCTGAAAGCG ATGCTCAACT GTTGATAAAT CCAATTCGAT 60
 AACATCTGTA TAATTAGGAT CTTCTTTCTC AACATCAAAh ACATATGGTT TTGTTTCAAA 120
 50 TATTCTTTTA CTAGCGCGAT ATGTTCTGTCT GATCTACCAG TTAAC TTCAT ATATTTAAGA 180
 ATTCTCATCA ACTGGGGAAG AATCCGCAAG TTGCTCCATA CTCTGGTGCC ATGTTTnCAA 240

(2) INFORMATION FOR SEQ ID NO: 955:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 514 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 955:

AAACATTTAC ACAAGTAGTA GAAGCAATTT ATGATGAAGA AGGTAACAGC TTaGamgCGG 60
 CGCGCCATCC aTTACAAATC GTTCAAATTA AAGTGGATCG CCCGATATAT CCAAACAACA 120
 TGATGAGAAA GGAAATTGGC TAATGAAAGC TACTACAATC ATTGGCATAG CTGGTGGATC 180
 TGGCTCAGGA AAAACAACCTG TAACTAACGA AATTATGAAA AACTTAGAAG GTCATAGTGT 240
 CGCTTTACTT GcTCAAGATT ACTATTATAA AGATCAAAAG CACTTGACTT TCGACGAGCG 300
 CCTAGAAACC AATTATGACC ATCCATTTGC ATTCGATAAT GATTTATTAA TTGAAAATCT 360
 TAAAGACTTG AAAAATGGTA AAGCAGTAGA AGTACCGACA TATGATTATG CtAGTCATAC 420
 AAGAAGTGgA CATTACCATT GGATTTTtAA ACCTAAAGAT GcTTATTTAT CGTAGAAGGG 480
 CCTTTTTCGC CTTTAGGAAA ATAAGGGTAT TTAC 514

(2) INFORMATION FOR SEQ ID NO: 956:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 388 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 956:

ATTTTAACGA ATATCTTGCC GTACGATGCC CAAGCTGCAT CTGAAAAGGA TACTGAAATT 60
 ACAAAGAGA TATTATCTAA GCAAGATTTA TTAGACAAAG TTGACAAGGC AATTCGTCAA 120
 ATTGAGCAAT TAAAACAGTT ATCGGCTTCA TCTAAAGAAC ATTATAAAGC ACAACTAAAT 180
 GAAGCGAAAA CAGCATCGCA AATAGATGAA ATCATAAAAC GAGCTAATGA GTTGGATAGC 240
 AAGCCATAAA GTCTCACCTG AATGACGGTC AAGTGTATAG CATAATAGTC ATGCTAAGTT 300
 AATGAGTCTC AATGTGTAGG GCACAAGTGC GGGCGTCTAT GCATGAATGT TGCCACGCTC 360
 ACAACTGGGA AGTGTAATG TGACTGTA 388

(2) INFORMATION FOR SEQ ID NO: 957:

- (A) LENGTH: 394 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 957:

10 AACAAAGTAC ATCGCAGTTA CGAGAAGAAA TAAATGCATT GTATAATCAA GTTATAGAGG 60
 TTGGACAAGC GTTATCAAAG CAGCGTCGTA TAGTCGCTAG GGAGTTAAGW GACCACATTG 120
 TATCGGAAAT TCAAAACTTA CAAATGAAAG ACGCAAATCT TGAGATTTCa TTTAAAAAAT 180
 15 TAGAAGAACC GAATATTGAT GGAATCGAAT TTGTAGAATT TTTAATCAGT CCAAATAAAG 240
 GGGAACCATT AAAAAGTTTA AATAAAATTG CGTCAGGTGG AGAACTTTCT AGAATTATGT 300
 TAGCGTTAAA AAGTATTTTT GTTAAATCGa GAGGTCAAAC TGCAATTtTr TTcGATGAGG 360
 20 TTGaCTCAGG TGTATCtGGr caAGCTGcAC CAnA 394

(2) INFORMATION FOR SEQ ID NO: 958:

(i) SEQUENCE CHARACTERISTICS:

- 25 (A) LENGTH: 503 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 958:

CCGCCATTTT TTTCGATTTT TTTTCAAGT TTTTCACGGT CTTTTGAAGA TAGACTATTG 60
 35 AAATCTTTTG CACCACTATC ATCAAAATCA ATATCTGCTT TCAATTTTGT GCTAGATTTT 120
 AAAATGAAAT TAATTGGTTC TTCAGcATAt TTGATGCCGA TATyTAACGT AGATTTCTGA 180
 GTGTTATTyT TTACGTCAGA ATCTATATTA TTTTCAAAAG TGAATTCATT TTCGTCGCTA 240
 40 TATTTATCTA ATGCGACAGT GATTTTACCT TTATCTTGAC GTTTTGTGCC ATCTACTTTT 300
 TCTTGGTTAT CTAATTTGAT TTTTGATTCA TCATATTCTG TCTTTTTACC AAATTCGTAT 360
 TTATCATTAT ATTTATtATC TTTwTCTTTA GAAGATACGC CTTTAATTGT ATATTTGCT 420
 45 TCAGCATACG TGTATTTATC TTGATCGAAA TCAAGTGCGT AATCTAGTTT TAACTTATCG 480
 TCTTCTAAAG TATTAGTACC TTT 503

(2) INFORMATION FOR SEQ ID NO: 959:

(i) SEQUENCE CHARACTERISTICS:

- 55 (A) LENGTH: 307 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 959:

TCAAACGTAC AGAGCTTGTT AAGTGTTTAG ATTATTTACG AGAGAGCGAC ACATTAGTTG 60
 5 TCTATCAACT TGATCGGTTA GGTAGAACGA CAAACTATT AATTGAATTA TCACAATGAT 120
 TCGATGATAA CGGAATTGAC TTACCA_nATT AGTAACCTGA ACATTTCCAC GAAAGACCCC 180
 ATGGGGCCAA AATGTTTTTA CCGATGATGA GTGCCTTTTT CCGGGTTAGA AGTTAATTTA 240
 10 CTATGTGAGT GTATAAAATA GACT_nAGCAG CCACAAG_nCG AGAGGCCGAA AAAAGCGGGC 300
 GCCCTCT 307

(2) INFORMATION FOR SEQ ID NO: 960:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 960:

ATAAGGACAT TTATAGTCGC CATATACGAC AACTAATGGT TTGCCGTTTT TCGAAGATGT 60
 CGTTGCTGAT TCTTTTTTAC CGCAAGCTGT TAAAATTAAC ATGCTCACTA TAAATAATGT 120
 30 TAGTAATTTT TAGTCCATAA TTA_nCTCCTAA TCCTAACCA_n GTC_nGCA_nAAA TTTCCTCCAT 180
 GATAATCCGC ATCATGTTGT TGATAATATC GTCTCGAATC AAAATCTTGC TTATATGATA 240
 CACGTTTATC ACTAAAAATCA TATGCATAAT AATGCACCTC ATCATCATTA CTCAAAGGTT 300
 35 TATAAGCTAA AATGATAATT TTATCCTTAT CATAGACATA AATATTAGCA TCTTTGCGTT 360
 CAAAATGATC AACACGATCA CCGTGCCTTT TTTGGCAAGT 400

(2) INFORMATION FOR SEQ ID NO: 961:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 961:

ACAATTAGTT ATACCCAAA GAGTTATGTC AGTGAAGTAG ACAAGCAAAA CTCAAATCT 60
 GTTAAATGGG GTGTAAAGC AAACGAATTT GTTACGCCTG ATGGAAAAA ATCTGCGCAT 120

GCTCCTGATA ATCAATTGCC ACCTTTAGTT CAAAGTGGCT TTAATCCATC GTTTATCACT 240
 AACTATCAC ATGAAAAAGG TyCagTGATA CGAGTGaATT TGaAATTTCa TATGGTAAGA 300
 5 ACTTAGATAT TACCTATGCG ACTTTATTCC CTAGAACTGG TATTTACGCh GGAAGGAAGC 360
 ATAATGCATT TGGAAATAGG AACCTTGTAh TTAnGTATGG 400

(2) INFORMATION FOR SEQ ID NO: 962:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 358 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 962:

CTTTTACAAA GACAAATTAG CGGTAATCGG TAAnGATCGT TGTTGATCCA GTTGCACTAT 60
 TGAAAGAATT AGACGGATTA AATGAACGTG GCATTCTTAC AAGTAATTTA CGTATATCTA 120
 ATCGTGCGCA AGTGATTTTA CCATATCACT TAGCACAAGA TGAATATGAA GAACGTTTAC 180
 25 TGGTGACAAT AAGATTGGTA CACTAAAAAA GGTATCGGTC CAGCATATGT AGCCAAGTCA 240
 CGTATCGGTA TCGTATGCAG ATTACTTGAA AAGAACATCG AAGATATTAA ATCAACATGA 300
 TATAACCAGC TATTCAAGGA TGTTACGAAC ATGhCACATT GATGAAnCTT GAGATATA 358

(2) INFORMATION FOR SEQ ID NO: 963:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 258 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 963:

AGTGAGCAGG TTGAAGTAGT AGGGCCGATT CAAATGGAAA GAGATACACA TAAAGATGGT 60
 AAGGTAAAGT GGCAATTGCT TTATATAATG AATCAGGATG ATGATGAAAT TAAGCCACCA 120
 45 TTTTTTATTC AATGGGAGGA AAGTGATTCC ATTGCGTACT AAAAAATTGC AAAAAATATT 180
 TCAAAACCAT TTTCAATTGA AACTGTATTG TGAAAGTAAA ACCGTCACAA CAGTATCGAT 240
 50 TGGTTGAAnT GGTTGhAT 258

(2) INFORMATION FOR SEQ ID NO: 964:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 388 base pairs

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 964:

TTATCAAACC GCCATAGCCA CATCTCGATT CAAGGATAAA TTTGTTTTCT CATATCTTAT 60
 CTCTCATGAC AGTGCACGAT ATATATCTTT TCCAAATATT CATCACTTTT TTCCTGTAA 120
 AATCATTCTT ATTATTAATG CTTTAATGAC AACTTATTTA ATTTATTGCA TTTAATGCCC 180
 TGCTTCATTT TCAAATATTA ACTTTAATCG ACTAGCTCAT CACACTATTT ACCCTTTCCA 240
 CCTATCACTA CTGAATTCAA AACGATTTGT TTACAAATCC CCTTATGCCA ACGGTCGAAT 300
 TTCATCATGT TTACATTTAA TTGCAAATGC CCTCTTGAAA TATTTTAAAA TTAATATTAT 360
 TCTTAGCATA CTAGTCGGAA TTATATTC 388

20

(2) INFORMATION FOR SEQ ID NO: 965:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 602 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 965:

AAAGTGAGGT ATAGTCCGAC CATACTCTAA AAACGTAGCG AGATAAATAT ATTTCAATCC 60
 TAACTTTTAT GTTTTGAGGC ACTTGCCATT TAGGATATTG TCGTTCGTAA TACGACACTT 120
 GTTGTATAAA TACACCTAGT CCAAATGGCA GCATCATGAG TAAGATACTT CTAAATAAC 180
 TTAAACCAAT ATCATGCCAT ATGTGTCCAA TAATCAATTG AAAGACAATG ATAGATACTA 240
 TTAAAACGAT TATATTTATT GTCACCTTGT CAAACGCACT CCTTTTCCAA ATAATAGAAT 300
 TGCTGCTTGC ATGACAACCA TAAAACATAC AAACATAGCA GTTTTAAGCG TTAGACTTTC 360
 TAGAATGTGa TTTAGAACAT GTAAGGGCTC ATTAAAGAAA TAAACGGaAT GTAAGCGTAA 420
 GAAACGACCA ATATAAATTC CGAATCCATT TAAAAACATT AGcACGaCAA CrATTAATCT 480
 ATTaAGCCAA CGGTGaGaAG TCAATGtTAG TATTTCAAAA TAGATTnAAA TCATCACATA 540
 AACCGCTAAG AAGACACCAA GCAGTAAATA GGTAAAGTAT TTCCACTCAC TTAAATTTAG 600
 TC 602

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(2) INFORMATION FOR SEQ ID NO: 966:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 744 base pairs

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(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 966:

	GTCCTAAGGT AGATTTATCT ACAACTGTTG TTATTTTAnC AATTATTGGA GCGATTTTAT	60
10	TAATGTTTGC TAGCATATAT TTTATnAAAA TTGTGACATC ATACTTTACT AAGAAACTTT	120
	TAGAAATTAA ATTTAATTCG AAATAGTATT TTCAATGAAG TGCTTCAAAG CTAAACTTTC	180
	ATGACATTTT TTTGAAACTA GAGAAAATGG CTCATCAACT TCTAGCtGAA TGCCTTCTTG	240
15	AAAATGTATT AATGTTGAAT TCTCTATGGC AGTCATACCA ACAATATAAT GTGCATTGAT	300
	ATAAATTTGT ATCGGTGCAC GTTTATGTTT TAACGGA AAA AGTATAGTTT TTGGGTTGAT	360
	GTAAATAGGA ACCAGTTTAT TAATATTTAG TATGTTTTTT GCAGTCTCAA TTAGCACACT	420
20	TTGTGATGAT AAATGCAATT TCGCATAATA TGfAACGAGT TTGTTAATTG GAACTTTAAG	480
	AATGTAATCG CAATGTAAAA AGACACAATT TGTTTCGAGA TGGTTTGAAG TAGCAGTTTG	540
	GATATAAAGT AGATATTTAG TAGAATTGTC TTGCAAATAT AGTACTCCTC GTTTAATAAG	600
25	TTGTTAATTT AATGGTTAAA ATAAATTTAT ATGAAGATGT TAGGGTGTTT CAACATCATT	660
	AACACATCGA CCGAAATTTT ACAATAAACT AATTAAAAAT ATGTTGGCAT TTACGCTTAA	720
30	CGGACATCTT AATTAATTTA ATCG	744

(2) INFORMATION FOR SEQ ID NO: 967:

(i) SEQUENCE CHARACTERISTICS:

35	(A) LENGTH: 503 base pairs
	(B) TYPE: nucleic acid
	(C) STRANDEDNESS: double
	(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 967:

	TACTTTGCAG GAGCATTAGG TATTCTAGCA TTTATAATGT CAATTGTATT GATTCACGAT	60
45	CCGAAAAAGT CTACGACAAG TGGTTTCCAA AAGTTAGAGC CACAATTGCT AACGAAAATT	120
	AACTGGAAAG TGTTTATTAC ACCAGTTATT TTAACACTTG TATTATCGTT TGGTTTATCT	180
	GCATTTGAAA CATTGTATTC ACTATACACA GCTGACAAGG TAAATTATTC ACCTAAAGAT	240
50	ATTTTCGATTG CTATTACGGG TGGCGGTATA TTTGGGGCAC TTTTCCmAAAT CTATTTCTTC	300
	GATAAATTTA TGAAGTATTT CTCAGAGTTA ACaTTTATAG CyTGGkCaTT AwTATATTCA	360
55	GTTGTTGTcy TAAAwTAwT AgTTTTtGCT AATGGACTAT TGGGTCAATA ATGGTTAATC	420

TTTTCCnAAn ATTGCnGGGG AAG

503

(2) INFORMATION FOR SEQ ID NO: 968:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 465 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 968:

TACAGGTAAA AAAGGTGGTC CGTTTATCGA TTCATTAAAC CATCGTAGTT ACACGAAAGC 60
 ATATGTTTCA TCAGAAACCG ATATTCCATT TTATGCTGAA GCATTGGA TTAGAGAAGA 120
 AAATGTTGTA CCAACAGGTG TACCACGTAC TGaTGTACTA TTTGATGAAG CTTATGCAAC 180
 ACAAATTAAA CAAGAGATGG AAGATGAATT GCCAATTATA AAAGGTAAGA AAGTTATTCT 240
 ATTCGCACCG ACATTTAGAG GTAATGGTCA CGGTACGGCA CATTATCCAT TTTTAAAAAT 300
 TGATTTTGAA CGTTTAGCAA GATACTGCGA GAAGCATAAT GCAGTTGTGT TATTcMAAT 360
 GCATCCGTTC GTAAAAAATa GmCTTAATAT TcaCgTGaAC CATAGACCAT ACCTTAATCC 420
 GATGTGGTCC AGATCCATCC GTGGAAAGTT AAACGGATAT TCCnC 465

(2) INFORMATION FOR SEQ ID NO: 969:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 300 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 969:

AATTCGGAAC AACGAGCTGG CAACAACATA AGATGACAGA GGCGAATGGT CAATCAATTC 60
 AAGTTAACTT AAATAATGCG CAAnGCGATT TGGGATATTT AACTGCTGGT AATTACTATG 120
 CAACAAGAGT GCCGGATTTA CCAGTAGCGT TGAAAGTTAT GAGGGTATTT ATCGGTATTC 180
 GTAAAGATGA TACAACACh ATTTACTCAC ACCTATACTC TAAAAGATTn CACACGTCAT 240
 CACAACGGCG ACTTGAGCAA CATGGACAGT TCCTAATGAA CATAATCAAC GGTATTGTTC 300

(2) INFORMATION FOR SEQ ID NO: 970:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 970:

5 ATACGCGAGC GAACGGTGAA GCGACTTGCT GCTGCAAAAC GTCTGCGACC TTGAGCAACA 60
 ACATGAATGG TCTTCGGTTT CCGTGTTTCG TAAAGTCTGG AAACGCGGAA GTCAGCGCCC 120
 TGCACCATTA TGTTCCGGAT CTGCATCGCA GGnATGCTGC TGGATTATCA TCCGATTTTT 180
 10 AAAACGTTAT TAGGCGTTGT CGTTGCAATT CAATTTACAG TACCTGCTTT GATTGGTGCA 240
 TTGGTTGCCA TGAAATTTGA CCTATCGCCA TTAGCAATTG CTGTTGTGGC AAGTGCAGCA 300
 TATGTAGGAA GCGGTGCAGC GCAGTTTAAA AATGGTGCTT GGATGATTAC GGGTATTGGT 360
 15 GATTTAATna ATACAATGAT TACAGCAGCG ATTGCAGTTG 400

(2) INFORMATION FOR SEQ ID NO: 971:

20 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 251 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 971:

25 AAGTGTAAGA TTAGAATAAA AAATTTATAA ACGAATTGAG AAAGACCAAA GCTAGCAATT 60
 30 ATTCAGAAAT TAAATCGAAG AGTCCTACAG TTAATGACTT ACCTGAACGA GATTTATCna 120
 ACAAATCTCA GTATGACCAA TATGGCAAAT GCCGTGTCCA TGTTAACTGA TGAAAAGTAC 180
 35 TTTGGTGGTA GTTTTGAAAG ATTACAAGCA TTGACGACAA AAACAACATT ACCCGTATTA 240
 TGCAAAGnCT T 251

(2) INFORMATION FOR SEQ ID NO: 972:

40 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 414 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 972:

45 TGAAGCTCTT aATAAATCTT TTCTGAACA CACACCAACA AAATCGTTAT CTTCAATTAAT 60
 50 AATAAATAAT GTACTTACAT CTTCTAAAAA AATTGTACAA ATAGCGTCAT AAAGTGTGT 120
 ATTCTCTCTT AGCACAACAG GTTGAGACAT ATAGTCCTTA ACCTCAAATT GTCGAAGTTT 180

TTCTAAAAAA CCTGACATTG TTAATATCGC TAAATCTGGT CTAAGCGTTG CTCTTGTTAA 300
 ATTCAACTTA TCTGCTATTT GTTCACCAGw AATGGGTCCT TTAGTTTTAA CAATTTGCAT 360
 5 GATTCGTTCT TGTCTTTGAC TGAGTTCTrw AGGkCTTCac CCCTTTtTAT GCnC 414

(2) INFORMATION FOR SEQ ID NO: 973:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 747 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 973:

GAAATCGATA CTAATATCTT CTTTATTTAC ACCTGCTAGT TCAGCTTCTA AGTAATATAA 60
 20 TTCGTCTGTt CATAtATATt CGTtACAAaT GAAGGTGTtG AAAaGTAaTT AAaTaCTTGT 120
 TTaCCTAAAT CTTTAAaTGT ATCACTTGGA TTACCGTTAA AAAAGTTTTG ATTCTCGAAT 180
 TGATTGAAGT TCAtATCATC ACTTCCATTA TAGAAATTTG TATTACAAAG CCATTATATG 240
 25 AGTAGTATTA AAAAAGTTAA AGTAAAAGGG GAGATAAAAA AGTAATAAAT GGGTAGATTT 300
 GTGCCTGATA AGGAATCAGG GCAAAAAGAAC TGAGCATCGA GATTTATACA AGCAATAAAG 360
 ATAATGAATA AACATATCGA TGCATACTTC TGCCCATCAC CTTATGATAG GGAGTTATTT 420
 30 TTTGTCTGGAA TAGTCAAAAT TTTTAGAAAC AAAATTCCGC AAATTATTAA TTATATCTGA 480
 TGCTTCTCGT TCTGAAATGT TGAATTCATT AAAGACcTTA ACAGAAATTT CAGCAAGAGG 540
 GCTTTTTATT GCTTTACCTT GTTCTGTTAG AGAAATTTGT AGGTTTCTTT CATCTTTCTC 600
 35 TTCACGTGTT CGAACACCGT AATCTTTCTT TTCTAATTTT TTTAGTAATG GkGTCAGTGT 660
 TCCAGAATCT AAGAACACAC GTTCACCTAA TTTTTGATG TTAAGTTTTT CATCATTTTC 720
 40 AATCGCCAAT TAAACCAngG TAnCnGG 747

(2) INFORMATION FOR SEQ ID NO: 974:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 257 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 974:

TGCTTCCAAG TAATGTGGAC ATTTAATACG AGCTGGGATT GAGATACACC TTGCAATGCT 60

TCTTGgncAT TTGCATTGCT TCTCCCAAGT GAATGCCTTT AACAGCTTGT GTCATCATCG 180
 ATGACTTGCC ATTGAAATCG ACAACCTTCA CCTTCAAAC TAGCATCTTT TATAATGCCG 240
 5 nCTTCTATAT CAAATGT 257

(2) INFORMATION FOR SEQ ID NO: 975:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 451 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 975:

CAATGGAGCA TATTTTACGT TCGGCAATGG ACATTGATCA nACAACAAAA CATTATATAA 60
 20 mTAATAAAGT AGAAGTTATC AAAGAAATTA TTAAAAAGT AAGAGGGGGA AATCACGTGA 120
 CATCACAAAA TCCAGAAGTT AATTACGAAG CATTAGCTAA ATATGGCCGC GACTTAGTAG 180
 AAGAAGTTAG ACAAGGTAAA ATGGATCCTG TTATAGGAAG AGATGAAGAA ATTCGAAATA 240
 25 CGATTCGTAT TTAAAGTCGT AAAACTAAAA ACAACCCTGT GTCATTGGT GAACCAGGTG 300
 TTGGTAAAAAC TGCAATTGTT GAAGGATTAG CGCAACGTAT AGTTAAGAAA GATGTGCCAG 360
 AATCATTATT AGATAAAACT GTTTTTGAGT TAGATTTAAG CGCATTAGTA GCGGGCGCTA 420
 30 AATATCGTGG TGAATTTGAA GAGAGATTAA A 451

(2) INFORMATION FOR SEQ ID NO: 976:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 571 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 976:

AACTATTAAT AATATTAAGT TCACTACAGA TGTTGCTAAT GGACCATAAG TTTTAAAGAC 60
 45 ATCTTCACTT TTATAACCAA CAATCGCATC TAAAAATTGA ACTAAGATCA TTGCAATGGA 120
 TATAGTTATC AAAAATATAG CACTATGAAT GACTAAAGAA AnAATAGCTA ATAAaAATAA 180
 AGGTAAGCTT CGACTAAGTG cATAATATGC ATTTATATTA TGGCTAGATG CACATGCTTG 240
 50 AATTGAATAA CCTAAACTTA CACTGGCACT GATTATTGTA AATATTGCTA AAACAAAATA 300
 CATGTTAATC CTTCTTTCTA TATTTGGATA TAAACAAGTA CTTGTCTAAA GTTATTTAAA 360

TATAACTATG TCATAAACTG AATTTGTTGA AATTTTTCAT TATGCAAATT TATTAATAAC 480
 AAACAGCTCG AACTATAGCA TCATTTTACT AATGAATGCA TTAAAGTAAC TATGACTAAA 540
 5 AATGCATATT AATTATCATT ATTAAGACTA T 571

(2) INFORMATION FOR SEQ ID NO: 977:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 274 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 977:

CCCCGAAAAA TTTAGACATT TTCAAACAGT AACATTTGAA GATTTGTCTA AGCTGGAAAA 60
 20 GAGTAGTATG CCATCAGGGG TCGGTATATT AGGCTATGCT GTTGACAAAG GTGTTGCTTT 120
 AAACAAGGGG CGCATTGGTG CAAAAGAAGG ACCAGATGCG ATTAAACAAG CATTTGCAGG 180
 TTTGCCGGAT TTGAATCCAT GTGnACTTTA GTCnGATTAC CGGAATGTTT ATCCTGGTCA 240
 25 TGGGGGAATT AATTGGATAC CCCAAAAGG AATT 274

(2) INFORMATION FOR SEQ ID NO: 978:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 877 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 978:

nTnTTACTTC TTCTTTTAAT ATTTCTCGTA TAGCTTCAAA TTTTTCCTG TCAAACAGTG 60
 40 TTCTTAATAT CCCTTGCTTT TCACGACTGT TTGATATTAA AAAGCGTTTG AATTCACCTT 120
 GAGGCAAAAT AAACAATTGT CGGAATTGAT CTGCATTAC TCCTAATAAT TCAATAATGA 180
 ATTGGGTACC TGAAATTACT TTACTTTCTC TAATTTCATA CTTGCCATCC ACCATCTCAA 240
 45 ATaCATCAAA TTTAGCGTTC GTTTTTGTTG TATTACCTTC TTTGATATAA GGGCCTTGTC 300
 TATGCACTTT ATAAATTCGA TGATTAAATT GAAATTCAAA TGTTACTGAC ATCGGCTGTT 360
 TACCATCAGC GAAATGACTT CTCAAATCAT TTTCTTCTCT TTGTTCAAGT GATGCTTTAC 420
 50 CAAACAAGGC ATAAGTCATT GCATCAAAAA TCATTGTTTT ACCCGATCCA GTCTTACCAC 480
 TTATTAAAAA CAATTCATTA TTATCAATTT TAGAAAAATC AATTTCTTCT TTTAAAAAGG 540

CGTTTTCTAA AATATTTTTT ATCTTTTAG ATTGGATATC CgATAATTCT TTATCAGTTA 660
 TATGTTTATA AAACATTTTCg ATAATTGACA TGTCaTCTTT TTCACTTATT TCyATAGCAT 720
 5 TATTTTCTTC ATnGTAATTA AAAGTTTCAT TCGTCAGCGC TAAAGTATTA GGATAAAATn 780
 GTTTTAAACT CATCATGGA TCAGTAATAT GAGACATATT TTTAAGTTTA AAATGTAAAA 840
 TAATTATCGT TATnTTTCAC ATGAACTTnT TCATTAA 877

10 (2) INFORMATION FOR SEQ ID NO: 979:

(i) SEQUENCE CHARACTERISTICS:

- 15 (A) LENGTH: 624 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 979:

ATTGGTACTA TACCATTTGT CCATTTTAGC GAAGACGTTA AACTATCGAT TAGCTAGTGA 60
 AGAAATTAAT CTCACTATAC CTTCTATACA TAAGCAAATT AAAAATTTAG AACAGCATCT 120
 25 CAATGTGAAA CTATTTGAAA CTTATAAAAA TCAAATTATC TTGACTGAAG ATGGTCATAC 180
 ATTTCTTCCA ATTGCGCAAA GTTTTATTGA ACAATATGAA AGTGGCATCA AACATATCCA 240
 ACTTAAAAAA ACGATGTTTC AATCGAAATT AAATGTTGTC GTGTCTTCAT ATATCGCGAC 300
 30 ATTCATTATG CCCAAATTTT TAAATCTTT CTTTAACGAG CATCCTTTTA TCGATGTTTC 360
 TCTTCATGTC AAAAATGAAA ATATTGAAAA AGATATTAAT AATCATACGT ATGACATCGG 420
 GATTAGCAGA AATCAACCTA AACTAAGAGA AGTTCATTCT GAAAAAGTAT GCGAAGGTAA 480
 35 AATTGTATTG ATTGCTCCCA ATAAAGAGAA TAATCATCTT CTAAGTGGG CATCTTTATT 540
 TGAAAAATAC AAAATAATAA GTGATAACCA TCCAGAATAT TGGGTCATCA CTTAAAAATA 600
 40 ATATTTTAAA TATTTATGAA AAAG 624

(2) INFORMATION FOR SEQ ID NO: 980:

(i) SEQUENCE CHARACTERISTICS:

- 45 (A) LENGTH: 457 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 980:

TTTGTCTGT TGCATAAACT GCAGCTAGCA TAATGTTAAT TGTTGCACCT ACGCTAACCA 60

TKGATTCATC AATTTTCAGCA CCTAAAGCTT TAAATCCTTT AATATGTTGA TCAATTGGAC 180
 GTGGCCCAAG TGGACATCCT CCCGGTAAAC CAATCACACA TTTTTTAAAT CTACCTAACA 240
 5 TGGCACCCAT CATATAGTAT GAAGCACGTA ATGATTCAAC TTTATTATTT GGtAATGCAG 300
 CATTTTgtAT TTCAGTTGTA TCAACTTCTA AwTCCGTACC ATTTaGTGaw GcCTTAAtAt 360
 TTAAAtCtkC tAAtAAACTC aCTAAAGTTT TAACATCAGA GATTThGCGG TAACCCTTCT 420
 10 AATTTACAT GTCCTTGAGC TAATAATGTT GCAGGAA 457

(2) INFORMATION FOR SEQ ID NO: 981:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 997 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 981:

ATTGCAGCAA CGCCCCCTGT AAAACTACGT ACTCTTACAT TTATGAAACC TGCTTCTTCA 60
 25 AACATGCGCT TCAACTCTTC TTTTCCAGGA AAATTAAACG TAGATTGCTG TAACCATTCA 120
 TATTCTTCTT TTGATTTTGC AAATAATTTT CCAAAAATAG GCATAACAAA TTTAAAGTAT 180
 AGTGCATACA TTTGTTTAAA GACTGGCAAA GTTGGTTGGC TCGTTTCAAG ACATACCACC 240
 30 ATACCACCTG GTTTAAGTAC TCTATTCAAT TyTTTTAaCG CGACTAAATA GTCTGGCACA 300
 TTTCTTAATC CAAACCCAAT TGTTACATAA TCAAAAGAAT TGTCTTCAAA CGGCAATTCC 360
 ATTGCATCAC CATGAACAAG TTAAACATTT TCCATTGAAG CAGTTTTTTC TTTTCCTACT 420
 35 TCTAACATAT TCTCACTAAA GTCAATACCA GTAACCTCAC CTGTTGGTCC TACAGCTTTG 480
 CTTAATGCGA TTGTCCAATC ACCAGTACCA CAACAAACAT CTAATGCTTT CGTCCCTTTT 540
 40 CTAACACCCA TGTCTTTCAT GACGCGTTTT CTCCATACTT TATGCTGCTC AAAACTAATA 600
 ATATTATTTA ATCTATCATA TTTTTTIGAA ATATTTTGAA AAACGCGATG TACTTGCTCT 660
 TTATTTGCTT TATTGTCAGC CATGCTTAAT TACCTCTACT TTTTAAATAA CTTTTTTGGA 720
 45 TATCGTGTA GTAAATGCTTT ACTTCACTTT GATTATATTT CTTGAAGTAT GATGGATAGT 780
 AATCAGACAT ATCTTCAAAT AAATAATTAT ATATTTCCGA CTCATCAATA TTGATACCGA 840
 AATGAGATAA CGTAAtATAT GGgAAAAGTG tTTCAATTTT TACTATTGCT TGAGAAATTT 900
 50 CATAATCATT TAAAGCTTGA TGATGTAATG AAGATTTCOA TTCATTAATT TCAACAATTG 960
 CTTTACTAAT TTCATTTTGA AATGATAAAT CATTGAT 997

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1118 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 982:

CATTCCCTTT ATCGGnACAA TTATTTTAAA TAATTGGTTA ATAAGTTTTT CTATTAATTG 60
 CTGTTTTACT TTCTAGAGCA ACAATAAATG TTTTCAGTTT AAAATAATTA AGATTGTCAT 120
 TTACTAATTT GCTTTTTCCA TTCTTTAACC ATAAATCAAC TGTAATTGC CACTCAATAG 180
 GATGATTTTT AATATAAATT TGCTCTGGAA AAATATAACC ATAATTGTGC ACTACTTCTT 240
 GATCAGTTAA CTGTAATTGA TACATTGCAC TTAAAGTGGG TTCTAAAACA GAATTTTGCC 300
 AGCGACAATA TTTGATATAT TGATTAATTG CGAACTTTGA TAATTTATAA ACAGCATGAT 360
 AATCACAAGG CGCCTCATT AACAATCAC TAATTTTGGC ATTTCTTTTT TCAGCGACAT 420
 ATTTGTGCCC GCCTAAATAT TGTATTTGTT GAAACATCAT TATTTGTTTT TTCTCTAAAT 480
 TGAACGTATG AAGTTTTTCG GTGAATGGAT TAATAACAT ACTTTGAAAA TGATTGAACT 540
 TCACTTTATT ATGACAATAA TCAACATCAT TTAmTAACCA ACTTACTTTA TATCCCATTT 600
 TCTTKAAACC TTCCGTTTCT TGAAGAATCT GTTTATAAGG AATTGGCGAA TACTGTAGCT 660
 CAATAACATA TTTATTATTA ATCAAATAT CCGGAATTTG TTTTATTTCT TTTAAAAATG 720
 GCTCTATCTC TACTTTACAT CCTTGTTGCT GTATCATCTG TGCTAAATC AATTTACTTT 780
 TATAATGTTT AATCGTTTCA TTATTA AAC ATTTTGTTC CGCTAAATGT TTATGTGCAA 840
 AATGACTAAT TACTTTGAGC CCACGCTTTA AAATAACTTG CTTGCCACAC ACCGGACAAA 900
 AATATTGTGT CTTTCTCAAT GCAGTAGTTG CTAATACGCG TTCCTTTTCT TCATTTAAAG 960
 CTACTAACAT ATCTTCACCT CAAAATATTA CACGTAAGTT TAACTACTAT TACTTTTTCA 1020
 GCTTTGGAAA TCCATTAAAA AAAAGGGACC CCCAAAGGAG GCCTCCTTTC ATAnGTGCGG 1080
 TGGCCTAATT AAATAATCCG TTAATTCCAG GTGGnCnC 1118

(2) INFORMATION FOR SEQ ID NO: 983:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 269 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

CATCCCCTGT TAAAAATTGn TATTTGTGTA TTGATGCTTC TCAGnCATTa TTACGAGTCC 60
 ATATTCATTG CTTCAAGTAA ATATCAGTAG CAATAACATT TAAATCCGGC TTTTCACATT 120
 5 TCAAGGTAAT TGCAGTACAC CACTACCCGT TTCCGATATC TACGGATTGT TGCATCATCT 180
 TCTAACTGTT GGTAAGAAAT GCAACCATTa CTGCTTCAGT TTCAGGTCTG GTATCAAACA 240
 ATTTGAGTTT ACATCAAACG GTCTACCTT 269

(2) INFORMATION FOR SEQ ID NO: 984:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 984:

AACCCAAGTG GAAAnnGGTTT TGGTGGAAAA ATTTTAGGTC CTTTATCTGT CGTGCGAATC 60
 ATTGTATTTT TTAAACTTTC CGCATAATCT TGATGGTCGA TTAACCTTTC GCGATAACAA 120
 25 TATTCAATCA CTTCAAGAAAT CGCTTGCTCT GATATCTCTT CTTTTTGTAa ATATTGTATA 180
 ACTTCTTTTT CAGTTCTCTT TTTATATGAT AAATATTGGA TTGCTTTATT TAAACCTATG 240
 CGATAATGAT CATACTTTTG AATCTCTGCC ATGTCAGCAG CnTCAAGTTG TnGCCCTT 298

(2) INFORMATION FOR SEQ ID NO: 985:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 431 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 985:

CCATGCGATT CCACCTATTA ATAGTAAGAC AATAATAATA GGAATTATAA TTTTAACTT 60
 TTTAGACATT TTGCTTCCTC CCAATTATTT ATGAGTTAAT CATATCAGAA CAATACATTT 120
 45 TATTAAATGG TTTATTTTAA ATTTTGTTTA AATTAATAGA ATTTTAGTTA TAATAATGTT 180
 TAATAAGTTA TTGGrAATCy AATAAACTAC mAAAAATAGT TTGATTACaT AATGATTctT 240
 GAAAAATgkT GGkTAACyTA ATAATATGCA TTTTTTkGGC GArGARgATT tATTtAACyT 300
 50 ATAAAAATAT kGAaGTAAGA TtGGGGAGAT tATGAATTtA TGGrAttGAA AGTCGATGAT 360
 TTTGTAAAGA ATATAAAAAG ACCATACTTG ACTGTATTGG GAGTATTTGT AGTTGCAGTT 420

(2) INFORMATION FOR SEQ ID NO: 986:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 329 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 986:

AAGGTTAGGn TGGAGTACCC AAAGTAGGTT TTAAAGGTTG GAAATACnAG GAGGATGAAT 60
 AACATGAATC AGTCAGTCAA ATTACTTAAA CATTTAACAG ATGTAAACGG CATTGCTGGT 120
 TATGAAATGC AAGTTAAAGA AGCAATGCGT AACTATATAG AGCCTGTCAG TGATCAAATT 180
 ATTGAAGATA ACTTGGTGGC ATTTTTGGAA AGAAAAATGC TGAGAATGGT CAATACTCAT 240
 TATGATTTCT GGTCTATGGA TGAAGTGGTT ATGGTAACAA GATGTAAACT GTTATTCATT 300
 ACGCGTGGTG TGTGATCAGC nGCACTCAA 329

(2) INFORMATION FOR SEQ ID NO: 987:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 545 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 987:

CATATTATTT nTATATGAGT TTACCAGTGT CAAAAAACA ATTGCTTAAT GCCAACTATA 60
 TTACATGCAT TGTTTTAAACA TTAATTGGAA CGCTTGTTAT TAGTTTATAT GCTTATGAAG 120
 CAGATGTGAT TGAACCAAAT TCAATCTATT TTTCAACTGC ATATGCATTT GTCATATCTA 180
 ACTTCTTGTC TATACCAATT GCATTAGTC AATTTACAGA ATTGCGTAGA GTCAAAGTGC 240
 CATATGGTAT ATACGTGTTT ACTATTATCA TTTTAGTTCC ATTTTATTT TCAATTGCAA 300
 TAGTATTGGT GAATTATTTT GTTCTAAGTC AATCATCATT CCCAGATTTA TATTCATATA 360
 TTTTAAATAT TGGTTTTCTA ATTATAAGCA TTGTTATACT TATTGTTAAT TATTTTAAAC 420
 AGCTCAATAA AATAAATACT AGAAAATTTA AAGGAGGCAG TCGATGAAAT TAGAACATAT 480
 TACAAAAAAA TACGGCTCAA ATGTCGTTT AAATGATATT GATTTTGAAT TTGGCGAnAG 540
 TAGAA 545

(2) INFORMATION FOR SEQ ID NO: 988:

(A) LENGTH: 607 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 988:

10 ACCTAGCATG ACATAATCAA ATATATCAAA AACACCTTTC TGAAGTGAAT CAACCGTTCC 60
 AATAGTTAAT GGTCTTTCAG AATCAGATGT CTTTCCACCT TGAACAGTCA GATGACTAAT 120
 TAAATATTG ACGGCATCTT CATCAATTTC CGGTGCTATT GTTTC AATAC AGCGCGTAAT 180
 15 TCCCTGTTGA TGTGTTTCAA TGGTGTGATC TTCAAAGTAG TGTTTCATTT CGCTCACAGT 240
 AGCATAAGGG AGTGATATAAA AATTAACCCC ATTTATCTCT ATTGGTGAAT TAATCGATGT 300
 AAAATCTGTT CTTATAAATA ACTGATTATG TTCAAACCAA CTCGCCCCAT AGTTTAACCT 360
 20 CTCTTTACCA TCGTGATTTT CACTAATAAT AATTATTGGT ATACGCAGTT CTAAATTTAA 420
 CTTTCCAATC GCTTGTCTTA ATAACATGAT TGCATCTTTA CTTGGATATG TTGTGTCATA 480
 TAAAcTCCAG CTATCACAAT GrTATCAGGT TCTTCTTCTT TCATTTTTTTC TACGAACATA 540
 25 TCTAAATAT ACGCTTGaTC TTCTAAAAGC TGTTTGCCAT CTAATATTTT CCCTAAGTGC 600
 CAGTCTG 607

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(2) INFORMATION FOR SEQ ID NO: 989:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 722 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 989:

40 ATCGCGTTAA GCAACAATTA CAACAATCAT CATATAAGCT AACGCCACAA CGCGAACTAC 60
 TGTTAGAGTT CTAATTGAAA ATGAAAAAGA TCATCTAAGT GCTGAAGACG TATATCTGAA 120
 AGTAAAAGAT AAAGCGCCTG AAATTGGCTT GCGGACAGTA TACAGAACGT TAGAGTTGTT 180
 45 AGCTGAACTA AAAGTTGTCG AAAAAATTAA CTTTGGTGAT GCGGTCGCTC GTTTTGATTT 240
 AAGAAAAGAA GCGGCAAAAC ATTTCCACCA TCATTTAGTA TGTATGGAAT GTGGTCGTGT 300
 50 AGATGAAATC GATGAAGATT TGTTACCAGA AGTTGAAAAT CGAGTTGAAA ATGAGTTCAA 360
 TTTTAAAATT TTAGATcATC GTTTAACTTT CCATGGTGTG TGTGAAACGT GCCAAGCTAA 420
 AGGTAAAGGA TAGTAAATTG CGTAGGTAA ATTAACCTTC GCTTTTTTTTA GAGGTGTGGT 480

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TAACACAATT GGTGCTTATA GACGTGATTT GAAAAAGTAT CAAGATTATA TGA CTGAACA 600
 TCATATCTCG CATATTGATT TTATAGATCG ACAATTAATT CAAGAGTGTh TGGGGCATT 660
 5 AATAGACCAA GGGCAATCTG CTAAATCTAT TGC GCGATTT ATTTCAACAA TCCGTAGTTT 720
 TC 722

(2) INFORMATION FOR SEQ ID NO: 990:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 366 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 990:

ATCCAAAAAA TACGAAAGCG CTTTCTATAT TGGTATGCAA GTATTTCAAA AAGAATAAAT 60
 TTAATTTTCC TACTTTTCTA AACATTTATC TTTATGTATA ATGTTTTC AA GTA ACTAAAT 120
 TATAAATTAA ATAAAGGGAG TGTTTATCAT GCTTACAATG GGGACAGCAT TAAGTCAACA 180
 25 AGTAGATGCC AATTGGCAAA CTTATATTAT GATTGCCGTC TACTTCTTGG GTnATGACTC 240
 CAACTTATTG ATAGTGTThT TATGTTTCAG ATAATGCCCC ATGACTTTGT CATGCCAGCT 300
 CCACCGATTT TGAGnAACGA CAGCGACTTC CGTCCCCAGC CGTGCCAGGT GCTGCCTCCA 360
 30 GTATTC 366

(2) INFORMATION FOR SEQ ID NO: 991:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 338 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 991:

TGACTACAGT AACATTACCT GTAAATAATG ATTGAATGGC TTCATTTTCA TCATGAATAC 60
 45 CTGTAATAAA TTCTAATTCT TCATCTGAAA CTTTTACAAT ATGCGCCAAT GGCAAAAAGG 120
 TATGAATAGT TTGTCTTAAA TCTTCAGCGT TATCCCATAA TGGCAATCTT ACATTAGGAT 180
 CAAATACGAC AGTACCATTT GCATTTAATG TTTTGGTAAT CAATTGATAA TGTGCATCTC 240
 50 TCATCGGACT ATCGACCAAA TCAACAGAAC AAAAATGTAC TACATCATTT TCATTACAT 300
 CaATATCATT CACAAAACtk GGkTCaAaTA aCATATCn 338

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 371 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 992:

AGTTCATCGT ATTCTTAATA CCTATATGCT ATCGTTCACA AACTTTTGTT CTTTCTTCC 60
 AACATACCGC CTATAATGCT CAAAAAGAAA TCAGCAGTGG AACCCTACG TTCCCTACCG 120
 CTTTATCATT TTCAGGCTTA AATATTTTAA AAATTTTGTG AGGAATCCGC TTAAAAAAC 180
 TCATATCTTC AAAAAAATG ACAAATTTA AATTTTGA TAACATCATT TTTTAGTAAA 240
 TGTATAATT TCTTTATAAT ACAAATATCG AAAGAAGGCG ACTGACTTTG AAAAAATTAT 300
 GTTCATTAAT TGTAGGTAGC ATTAGTTTGT ATCCTTGCCA TTATCAGCTT GTGGnAAAGA 360
 ACnAACnAA A 371

(2) INFORMATION FOR SEQ ID NO: 993:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 530 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 993:

ATAATGATTT ATCAATCGAT GTTAGATGCG GTTCAATTAT ATCCTAAGTC TATCGTGGTT 60
 GATTATACTG TGGATGGACA ATACaAAAAT GATTGTCACT ATTTCCGGTCA ATCATCGATC 120
 AACATTGCCG ATTGGGCTCA AAACAATAAT TATTATCCTA ACCTGATATA TGCGATTCAA 180
 CAGACTCTTG ATTTAATACA TTATTACTCT GTAGAAACGA TTTTCGATTT AGCTTTATTG 240
 ACACTTCTGA AAGGTGATTT ATCAATCGAT GGTCAATGTCG TTTTGTATTT TAAAGCCCCT 300
 ATAGCAACAA GTGCTTCAAT ATGGGAACT ATTAAACTA TTGAAGATTT TGATATGATG 360
 TCcAGTTTTt TTGAtAAAtG GCTTATAtG ATCATCATCC TATACCTTTT CGCAACCTTT 420
 TTATCGAGGA TTCAGAACAA CTTAATTCGC CAGATAATTG GTTGTATTCT ACCAAGTTTA 480
 TGCTACCTAA ATGGGnTATA TAAAATAAGC AAAGCAACGT GCTGATAACA 530

(2) INFORMATION FOR SEQ ID NO: 994:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 551 base pairs

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 994:

	TATTGGATTn TTnCCACCAA AGGCAACGGT TCCTTTTCTA ATTCTAATAA TCAAATCCCC	60
10	ATTAATATCA ATCCCACTCA AATTCTTTCA CATCATTGAG TATAAAATAA TATGGTGATA	120
	TACGTTGAAG TTGATTnTCT TATTTAAGTA TACTCCAACA GTATTTTATA AAATTATTTA	180
	GTCATCATCT TCAGTGTTTA ATTCAAAAAT ATAGAATCTA CTGTATTGCA TAATAAATTG	240
15	AAATGCCACA AATTGTGTAC AAGCAATAAT AATGATACTT ACCATTATGA CAAACTTGGA	300
	TTCTACGACA TTGGGCACCA ATATATATTC GATAATTCTT TCAATATATA TAAATGCGCT	360
	CAACGCGGTT AATAATAAAC CGAAATGTGT TTTaGTTTTA CCACCCCAAC GTTTTGTyAC	420
20	TTTAGGTAAT TTTAATAACG TGAACATTCC GCCAATTACT AATAACAAAT AACTAATTAT	480
	GATTGAAATC GTACCCATCA ACCAATAATT GAATAGGTCA TAATGATTTT GTACAGCAAC	540
25	AAAATAATAA A	551

(2) INFORMATION FOR SEQ ID NO: 995:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 729 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 995:

	ATTGCCCACC ATTAGGTAGT GGAACACGAA CTTTCATCATC TAAACCTTTA CCAATTAACG	60
	CTTTAGCCAT TGGTGATTCA TTTGAAATCT TACCATTAAA TGCATCTGAT TCAGCTGAAC	120
40	CAACGATTTG ATAACCTTCC TCTTCATCAC CTGGTAATTC TACAAACGTT ACTGTTTTAC	180
	CAATTTTAAC AACGTTGTTA TCTCCAGTAT CTTCAATGAT TAATGCATTT CTTAACATAT	240
45	GCTCAATTCT TTGAATATCT TGTTGATGA ATCCTTGTTT ATCTTTTGCT GCATCATACT	300
	CAGAGTTCTC TGATAAGTCA CCAATGAAC GTGCAACTTT AATTTTCTCT ACAAATTCAG	360
	GACGCTTAAC TGTTTTTAAT TCTTCAAGTT CACGCTCTAA TTTTCAAAA CCTTCTTGAG	420
50	TCATTGGATA TTGCTTTTGA TTTTCCATAT TGTCATCTTC CTTTACTGAA TTATACTATT	480
	GCTTGCTAAC TAAAGACTGA ATTTTGTGTT TCATAATATC TATTGCAACT TTATTGCTCC	540
55	CACCTTCAGG AATAATTATA TCAGCATATT TCTTAGTCGG TTCAATAAAT TGGTCATGCA	600

TTAGTATCTC GTGTTGAAAC GGCCTAATAT nCTCAAGTCT GGCATCTGTA TCAACATATA 720
TnTTnAACAA 729

(2) INFORMATION FOR SEQ ID NO: 996:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 996:

GACAAATATA CTGCTTCTAC TCAAATATTA GTGAACATGA AAAAGTCCTC AAGTGATTTA 60
GCTTTCCCAA AATGTTCAAA GTAGTTTGCA GTCTGTTAAT ACATATACGG AnATTATCAA 120
AAGTCCTAGA TTCTAGATAA AGTATCTAGA GAATTGATGG TCAGTATTCA ACAGCTGAGT 180
GAAATCATTT TAAAAGTAAC CATCCAACCA ACTCTCAAAT TATTACTGTA CAGTTACACT 240
GGGATAATCT GATCTGACAA ATGTATAAAT ACTAAGTTTT GCCAGCAGCT AAATAGAGGT 300
GTATGTACGA CTTCCAnCTG TAGnG 325

(2) INFORMATION FOR SEQ ID NO: 997:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 271 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 997:

CTTCAGTTGT CGGCAAATCT TCTATATTGG AAATACCmA TACATTTAAA AATAAATCAG 60
TAGTAATTAA CTGTTGGCTA CGCTGTTTCA TAACCACTTT AGCCTCAACT AGTCCTTTGG 120
CAATCAATGT CTTAACTGCA CCATCTGAAT TGAtACTACG AATTAATTCA ATATCACTTC 180
TTGATAATGG CTGGTTATAA GCAATAATTG gATAGTACTT CCATTGCTGC TTGTGAtAAT 240
TTCATTTGTG aCTTTTGTTT AATTGAATTG T 271

(2) INFORMATION FOR SEQ ID NO: 998:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 498 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 998:

TTTATGTGCT AATTTGTAAT TGAGATTCAT AATGGTATTT AAATCATTAT GGTGCGGGAG 60
 5 TTATGGTATT GCCATAATAT GAGAGTGCAT CCACTTCTAT AAGTAATGCA TATTGCGAGT 120
 GCAGGaaTGA ATGAGTGCTT GATTAAAATC CTTATGGGTG GTTGACATAA TTTAAAAGAAA 180
 CCACATTTAA AATTTCTTAA TCACAAGCGG TTAAGTAGGT ATAGTTTAGT TTTGAGTAAA 240
 10 TCTTTTTTAAA GGTGTACTTG TGCATTTTAC TTAATTAAAG ACATAAGACA TTTAATCGGC 300
 CTAATAATAA TAAAAACTA CCTGTTTAGG TAGTTTTTTT AATGTAATAG ATTAAAAACAC 360
 TAGTTCATTT CTTATTAAAG ATGGATAGTT ATTTTATAGA TAAATTGTG CTTTAGTGTA 420
 15 GCGGTAATTT TTAGGACTTT TTGGTGGAa AAATGTTCTT AATAAAAGTA ATAGTCCTAC 480
 TTTACCGCCA AAGCCATA 498

(2) INFORMATION FOR SEQ ID NO: 999:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 568 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 999:

TGAGCTGGTT GTTTATTATC ATCAGTTTTC TTCTGATTAT CATCTGATTT ATCTTGAGAT 60
 GCTTTGTCAT CCTTATCTTT CGACTCATCC TTTGATGCTT TATCATCATT CTCTTCTTTA 120
 GCAGGACGTT GCTTTGTAGG TGCTTGTTGC TGAGGTGGCA CATATTGATA TTGATTCTGC 180
 35 TGTGGCAATT GCTGATATTG GTTTGCTTGT GAATCTAGCT CATTCTGCTC TTTTTCCTCT 240
 TGTTGCTTTT TCTTCTCTC TTTTCTGCA TTTTCTTTT GACGCTTTTC TTTTGTTC 300
 TGCTTTTGTT CGTTCAACAT ACGTTCTTTA GCTTTATTCG AATGATCTAC ATATGCAAAA 360
 ATTGCAAATA CTAATCCTCC GAGTAATAGC AATACCGTCG CAATGCTAAC TACTTTCGCT 420
 GTTGTAATCA TTTTCTTCTT ACTTCCATCT TCATTTTAT TGTAGTCGTA ATTTTGATTC 480
 45 GACATACTCT CCCTCACTTC AAATAATTT AAATATAGAA ATTATCACGC AAaCATTAAAC 540
 ATTTTCACAA CTAATTTGCG ACCaAGTA 568

(2) INFORMATION FOR SEQ ID NO: 1000:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1441 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1000:

5	AGTGTCTTCTA ATTGCAAAAT TCCAAATACA GTGTCGTTAT TTACTTTTTT CATGCTAAAC	60
	ATCTCCCAAT TAATAATCAC ATATTTAGCT ACTATACAAG TATTAACAAA CATCCCAACA	120
	ATCCCAAAAC TTGTATGTGC TAACTTATGC ATAAAACTAC AAGTGTAAT AACTTGCTT	180
10	TCTATTCAAT TGTCAAAGTT GAATAAAATT AAATAAGTAT AAAAACCAAT AATCAATAGA	240
	GTTAATATTT AGAAATAAGA TAATAGTACA TAAAACAAAT CACTCTATTA CATATTAATT	300
	TTATAATTTA TATACAAAGA AAATATATCA ATATTACCAT TAAATTGCAA CAATTCTACA	360
15	TATATTTCTT CAAAAAGAT ACGCATTGAA TTTTATTAC ATATAACTCT CATGAAAATT	420
	GATTAAACTA AATTAATTAG TTAGCCTTAA ATTTAACAAA TTAAATCAA CCGAATGAGG	480
	CTAAATTGGT TATTTTTCAA GATATGATT GTATAAATCA AAACATTTCT TACAAATCAA	540
20	ATGTGTATAA AATGTGATAT ACATTTTCAA CCTTAAAAA GTTCTAAAAA AAGATGAGCA	600
	TCTACTGTCT CATCTTTCAG TTCTTTTTTA CGGGTCTGTT TTCTAATTTG AGCACAATCT	660
	TCGATTTCTT TATCTAAATG ACTACCAATT AAATCTATTT CTTCTATTGT TAAATCGCTA	720
25	TCTCCATCTT CTTTTATCTC TGGTATTATT TTTTCTTCAA CTAAGTCACG ATATAGTGTT	780
	TTTGAATTCT CGTTCAATTT CGATTCTGTA TTTTGAATAC TTTCTTCCGC ACCAATGTAT	840
30	ATCTATTGGC ACTAGCTTCT ACTTTTGTAC CATCAATAAA AATTGAATTA TCATCAATAA	900
	GATTTTGCTT TAAACATTGA CTATAGAACT GAATAAATAA AGATTCAATT AACGCATCAG	960
	TATTAGGATT CACTCTAAAA CGATTAATAG TTTTATAAGA AAGTGTTTGA TCTTGGGCTA	1020
35	ACCACATCAT TCGAATACTG TCATGAAGTA ATTTCTCTAT TCTACGACCA GAAAATACAG	1080
	ATTGAGTATA TGCATATAAG ATGATTTTTA ACATCATTTT TGGaTGATAG GATGTTGCAC	1140
	CACGATGATG TCTGAATTCA TCGAATTCGC TATCAGGTAT CGTTTCAACA ATTTCATTAA	1200
40	CATATCGCGA AATATCATTT TGAGGAATTC TAACGAAGTT TCTATTGGTA GTGTAAGTTG	1260
	GGGTCATGTT ATAATTTTTA TACATAAGGC ACCTCTTTAA TTTAGTTTAG TAGTATTTAT	1320
	TAAATTATAC GaAGGGACCC AACACAGAAA ATTCATTTTA TTGAATTTTA CATTTATGTG	1380
45	CAAGTTGGGG AAAAATGTCT TATTTTTTCA AAGTATTTAA AAGTAAAATT ACATGTTAAT	1440
	A	1441

(2) INFORMATION FOR SEQ ID NO: 1001:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 587 base pairs

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1001:

TAATAATATC TGTCATATTA AGTCTCCCTC ATTAGAACTC ATTATAAATG AAGTTATTGT 60
 GTGTGTCGCC ACTGCCATAA ATTAAATATA AAGTAATAAA TATTGCCAAA TACAATAGTG 120
 TTAATAAATA TGGTTTGAAT GCTTCAACAT ATTTATTAGG TGGCTGTTTA CTTTITAGATT 180
 TCATATTGCA CCTCTTAAAG TTCTTAGTAA AAACGCCTTT ATAAAGACCG TTCAATATAA 240
 AATACGTTTT AAAATTTGTT TTTTACAATT CATTATATCG ATATTCATAA TGAAATTCAA 300
 TTTTAATTTT ATAGATTCAA CATAGTAATT GGTGTGCATC ACTCAAKTAT TGTAATGAT 360
 ACACTTTGTT GAGrACATCA TTCATTTTAA AGGTTATTTA AACAATAAAC AATTACAGTC 420
 TATATAACAA TTTTGTATA TACGTCAAAA TCAAATAAAC TCATCACATT AATATGACGA 480
 GTTTATAATG TTATTGAATT ATCATCAGCG CAAATATATA CATTGCAAG TCAAGCATAA 540
 CATATTTAAC AATTGCTTTG CTTGGTTTTA CCAATGGATT AAAAACC 587

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(2) INFORMATION FOR SEQ ID NO: 1002:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 522 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1002:

CAATTGTGTC ATAATTTTGC TGATGATAAC TAATCGTTTT GGAGTAGCTA TTTGATGAAG 60
 TTCGTCCAAT ACCTTTTGTT GAATCGAATT TACCACCTGA GCGTATATGA AAATGTACTG 120
 TCTACTTTTG CAGTTGAAAT TTTATTTTTC GGCAATTGGT CTAATATTTT AGTTTTACGA 180
 TTTCTTTTTA CTTGAAAATC TACATGGTAC TCACTTGGAT ACTTTAACCA ATTTGAATTT 240
 TTTTCTTCTT TATGAGATTC AAACTTTAAA TTTGAATGAA TTGAGCCTTG TTTTTTAACA 300
 AGTAATACAT TCTTGTCTA AGTTGGATCA TCGATAAAGT CGAATTGTAA ATTTTGGAGT 360
 ATATTtGTWT TCTCATCATA TACTGTTTCA GTTCGTTTTG TGATTTTACC GTTTTTCCCA 420
 ATATCATCCG GTGCTGTTGA ATTTTATCT TTATTAGTAA CATTACGTTG CTTTTGTGAn 480
 CTTATCAACA TGTCTTCTAT TTGGCTGAnG CTTATGGnGA TT 522

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(2) INFORMATION FOR SEQ ID NO: 1003:

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(A) LENGTH: 323 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1003:

10 TCTTTGTTTG AGACATAATG TCATGTAAAG TTTTCACAAAT GCGTTCTTCA ACTTGTTGCC 60
 TTGCCTCTCC TTTGAAAGGA ACAATTGCAT CTCCTCAGGC TTGTATAGAT 120
 TATCAAATAG ATAGACTGAC TCACCTTCAA ATATTCCAAA ATGCCATTCC TTCAGTCCCT 180
 15 TAAAACGTTG ATACGATTGG wTAGGTGCAA CATTTTCAAG TGTGTCACTT GCGCGTTCTT 240
 GCGTTGATGA TGCATATAAA TCGAAGTTTA TCCCCTTAGT TTCATAATAA CTACGTGCCT 300
 TThGAGCTTG AGCAATTCCA AGT 323

20

(2) INFORMATION FOR SEQ ID NO: 1004:

(i) SEQUENCE CHARACTERISTICS:

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(A) LENGTH: 320 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1004:

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TTCTAACTTG ACGTGACTGG GCATTTCTGT GnAAATnTTC TGACATTCTT TTTAATATCC 60
 GCAACGCAAT TGCTTCAGTT AAAGATTGnA ACTTGCAACA TTATTTGGTA CGAAAAAGTC 120
 AGTTTTAATG TCGATATAAG ATTTATTTTT TTTGTTATAT AGTTTCGCAA CTACATTGG 180
 TTGTCTTACT TGATCATATT TTGCAACCGT ATCGAATGCC GTCTTTTCAA ACAGCTTTAC 240
 GAGATACGTA AACCATGACC CATCCATCGA AGTCCTTGGT AAAAACCAG GGTTCGGAA 300
 GCCGTAGGGT TTGAAAGATA 320

(2) INFORMATION FOR SEQ ID NO: 1005:

(i) SEQUENCE CHARACTERISTICS:

45

(A) LENGTH: 305 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1005:

nATTAATGCT AGCCAAAACA GAnTTGCAAn ATGTAAAGAC ATGTGAAACC CTCCTTATAT 60

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CGATATTTAT AAAAAATAAT ATTTCACTTA ACCAGTTTTT AGTTATCATT GCAATGGTAA 180
 AGGATACGAT GAGTATCACA CCACAAATGA TAATACCAGG CAGGAGCCAA CATAAATCAT 240
 5 CTAAATCTTT ATTATATGTG ATTAAATAT TAAAGATAAC AAAAGTGGTA GTAATAACTA 300
 TATTG 305

(2) INFORMATION FOR SEQ ID NO: 1006:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 334 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1006:

TTCAAGATAT CAGTATAAAT AAAAActTAA TATGCTCATT ATAGACAGCT ATAActATAT 60
 TTTCTCGTCC CACTCTATAG AAATCAATTT CATTTATTAC CATTTTCTCT ATTTAAAAAC 120
 ATATTTTTGG TATTAACAAT TAAAAGTGGG TATATATATT TAATGAACCA ATTTTTTAGG 180
 25 AAAGTAGGGC TAAACCTATG GAAAATAAAT TATACCACAT GGTGTCCTCT TTTACCATGA 240
 ACACAGTGAA TTAAAAAATA TTAAnCAAGG TATTGGGGAA GTAnCACCAG CATTAGGTCC 300
 AATTGGTAGC CACCTTCCAA TCCATTGGGG GnAA 334

(2) INFORMATION FOR SEQ ID NO: 1007:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 565 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1007:

AGAAAATTTG TTATATTAGA AGCGAATAAT TTTAAACAT ATTATGAAAT GTAAGAAGAA 60
 ATATTATGAA ACTAGGAAAA GTAGATTGTT GAAAAATCCA TACAATAGGn GAnGTAAAGT 120
 45 GAATAAATTC TGGTATTACT AAAGCTATTG ATTGTCCTAA TTGTAATAAA AAGTTGGATA 180
 GTGTAGTTGA GGGGAGAAAA ACTAAATGC AAAAAATATAT TCTCAATGGA TCATTATAAA 240
 TACCAATTAG aTTAAAGTAT TGCGaACATT TACAATTAGa AATCAGTATT AATCTGCCAT 300
 50 AGATAATTGT ATTAATGTAA AAmATAAAAT AGAATGAGAA TATACGGAAA TTTTTTATAC 360
 ATTTATAACC AATTCTGTTA AACTGTGAAG AGTAGAGTTA AAAACGAACT TTTTGTtTAT 420

AATGATTGAA CGCTATTCTA GAGAAGAAAT GTCTAATATT TGGACTGATC AAAATCGCTA 540
TGAAGCCATG GTTAGAAGTG GAAAT 565

(2) INFORMATION FOR SEQ ID NO: 1008:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 400 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1008:

CAACATTAGC GTCTAAACAA ATCTTTGACT AAACGTTTAC TTGAGCGACC ATCTTGATAT 60
TTAAATGTT TATCTAAGAA TGGCACAACT TTTTCAACCT CATAATCTTC ATTGTCCAAA 120
GCATCCATTA ATGCATCAAA GGACTGTACA ATTTTACCTG GAACAAATGA TTCAAATGGT 180
TCATAGAAAT CACGCGTCGT AATGTAATCT TCTAAGTCAA ATGCATAGAA AATCATCGGC 240
TTTTTAAATA CTGCATATTC ATATATTAAA GATGAATAAT CACTAATCAA CAAGTCTGTA 300
ACAAAGAGAA TATCGTTAAC TTCACGATGA TCTGACACAT CGATAAAGTA TyGTsTATGT 360
TCACGTGAAA TAYYAAGTCy ATTtTTTACG AaCGGATGCA 400

(2) INFORMATION FOR SEQ ID NO: 1009:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 454 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1009:

TATTGTAAAA ACTGTGGTTC TTACAATGGC GAAGAAGTAG CAGCTAAATA ATTTTAGTTA 60
CTCAATATAA AAaGTCCCGC TTAAATGAT TGTTTTAAGT GGGACTTTTT ATATTGCGAA 120
AAATAATTGG cGAACGAGGT AACTGGATAC CTCATCCGCC AATTAAAATT TGTTAATTTA 180
ATAATTAAAT ATAAAGACGA TTTATTAGTT TTTACGTTTT CTAGGTAATA CGAATGCAAC 240
GATGCTACTT AAAGCTAATA ATGCCATTAA TGGTAATGTC ATATCTnTAT TTGATTCTTC 300
ACCAGTTTGT GGTAAATGATT TTGCTTTATT TTCTTGtGTA TTTGTATTGT TTTGGCTTTG 360
GAGTGTGTCC ATCATTTGTG TTTTAAATGT TTGCTTnTnG TAATGGAGCA CTAATCTTTT 420
GCCTCGCTAG AACCTGCCGG AGGTTTGGAA CCAC 454

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1010:

GGTACAACAA CTTTAGACAA TGAAATATTA AAAGATACGG ATGATAAAAA GTCGAGTAAA 60
 ACTTTTGTG GCGGAACAAA AGTTGATGAC CAACATGCTA GTATCGGAAT GGATTTTGAA 120
 AATCAGGACA AAACTTTAAC TGCCAAAAAA TCATATTTCA TATTAAACGA TAAAATTGTC 180
 TTCTTAGGAA CTGGCATTAA AAGTACTGAT TCATCAAAGG ATCCCAGTTA CCAACCGATG 240
 AAAATCCGCA AGCCGATGGG GAATACGGTA TTTTCCGGCC GTTAACCAAC CACCCATTCC 300
 GGTATCCGG GAAACCATT C ATCCTTTTA GGAGnChCCG GTnCCnAAAA GGACCTCGGG 360
 TATCCTTTTT TTAACCAACC CGAAATTACT GGTAAAAAG 400

(2) INFORMATION FOR SEQ ID NO: 1011:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1011:

TTAGGTATTC GCAAAAATGA TCTTCAATAT ATAGCTATGG CCAAAAGATG GGCTAAAGCT 60
 TATACAATTA CTGTAGCAGT GGGAGTTGTT ACAGGTACAA TTATAGGACT TCAATTATCA 120
 TGATTTGGCC TACATTTATG GAAATGGGTG GACACGTATT GCACTTCCCT TATTATGGGA 180
 ACATTGCGGT CTCTTGGAGC TATTCTTAA GTATATATTA TATACTGGGA TCGTTTAAAA 240
 TAATGGCACA TTCTTAATAG TATACCAGTA ATTATGGGGC CTTCTCAGCA TCTCATACTC 300
 AGGAATCATT ATGAATACGC CTGCAGGTTT GAGTGAAGAT GGAAGTGGCC ATGTCACChT 360
 AGAGCGTGTT ACCCACGTTA AGTCGTCATT nCGAATACAC 400

(2) INFORMATION FOR SEQ ID NO: 1012:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1012:

	CTTTATGGGA TACTACTACAA ATCGAGACTA TAAGGTTTTT TATTTTATTT ATTATTACAT	60
5	TATCAATAGT TTTATAATCG AGCTTCAAAA CTTTAGAAAA TAGTAGAAAT AGCATTCAAT	120
	ATAGTGCAAA AGTGCAAATT GATAACTTGA CACTTATCTC CTATAAACCG TACAATTAAT	180
	TTGTATGATT TATATATAAT TTCATAAAGT CATATTGAAT TTCATATAAA GAGCAAACCC	240
10	TAGAAAAaNGA GGTGTTGTGG AATTATTAAG CTCCTACTCA TTTGCGGGGT CATCTAGGGT	300
	GTGGAGGATG TGTGCCGAAT TGTGCTCAAA nATCCCAGCA GCAACGCGAG TTGAACAGCC	360
	TAAGACGCAA CAAAGGATCT GnnAAGGACC ATCAGGCACG	400

(2) INFORMATION FOR SEQ ID NO: 1013:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1013:

	GTCGTTGCTG ATACCACGCC AGTATTGGTT TTAAATGATA AAAAAATCTG TGAGATTGCA	60
	TCATTGAGAC AAACATCGCT ATTTGAAATG GCCGAATATA TAGGGTTTAG CGAGCCACAG	120
30	AAATTAGTAC AATTATTTAT TAACCATGAT AGGAAGGTGA GACGCCAATG AATCAATATA	180
	ATACTATAGG TTTTCACCCG GGAAATAGTC GTATTCATCA ATTAAATGCG ACTGTAAAC	240
	TTTTATnCTT ATTAGTTGTT CTATTCTGCA ATGGTnCTAT GCACAGGTAT TnATTTAATT	300
35	AGGCTCACAT TTATGGGCAA TTCTCAATGA TGAACAGTCG TTGTGTAATC TCG	353

(2) INFORMATION FOR SEQ ID NO: 1014:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 627 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1014:

	CAAAGCCTTC AACAAATAAT CTTTATTAG TACTGATTGG TTGCACAACA TAAGTTACAC	60
50	CAGGTTCATC TTAAATGTA ACTTCCTTAT AGAAGAGACC TTTTTTAGCA CTATACTCTG	120
	TTTTTCTGA TTTAATTTTA TCTTTTAGAT TTTTCTCTC CAAGTAACTG TCAATTAGTT	180

	ATGAAATAAA TAATATAATG ATAACCTTTAA TCGCGTTTTt TTTCTTCTTC ATTATGTAAC	300
	TCCTTTTTGC TTATCTATTC AGTATGAACG AATCAATTTA TTTAATAAAG AGTTTTTACC	360
5	AGATTGTAAC AAATTTTTTT ATTCTCAATA TTATTATAGA AATCGAATTA CATACACGAT	420
	GCTTTTAAAA AATTTAATAA CAAATTTTAT TTTACTATCT ATCAAAATAA TTGACTACTT	480
	TTAACAATTA AGGATGATAC AATTACATTT TTTTCAATTT AAAAAATCAG TCATATCAGT	540
10	AATTACCGAT GAAAATACTA AGATATCGAT ATATTTTGCA TTATTTAACA TTTAAATTCh	600
	ATTATAGACA ATTCAATAAT TGCGATG	627

(2) INFORMATION FOR SEQ ID NO: 1015:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 462 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1015:

25	TAGTGTGACA TTAACACTGG AACAAAAAGA AGCTGCAATT GCAGAAGTTA ATAAGCTTAA	60
	ACAACAAGCA ATTGATCATG TTAACAATGC ACCTGATGTT CATTCAGTTG AAGAAATTCA	120
	ACAACAAGAA CAAGCGCATA TTGAACAATT TAATCCAGAA CAATTTACGA TTGAACAAGC	180
30	AAAATCAAAT GCAATTAAAT CGATTGAAGA TGCAATTCAA CATATGATTG ATGAAATCAA	240
	AGCTCGTACT GATCTAACAG ATAAAGAGAA GCAAGAAGCT ATTGCTAAGT TAAATCAATT	300
	AAAAGAACAA GCAATTCAAG CGATTCAACG TGCGCAAAGC ATCGATGAAA TAAGTGAGCA	360
35	ATTGGAACAA TTTAAAGCTC AAATGAAAGC AGCTAATCCA ACAGCAAAAG AACTAGCTAA	420
	ACGCAAGCAA GAAGCTATTA GTAGAATTAA AGACTTTTCA AA	462

(2) INFORMATION FOR SEQ ID NO: 1016:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 235 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1016:

50	TGATTGGTCC CATCGACTCG TTATAACAAA TTGAAGGTAC AAAAGTATCT TGTGATTTAA	60
	TAAATTCAAG TAAATTCGTA CCTGGTTCTA CAAGGTAATT CTTTTCCATC AAGTGTAACC	120

ATAAATTGCG CATATCCACC nAAAATAACG ATGCCCCACA CATCTTTCAG ATAGG

235

(2) INFORMATION FOR SEQ ID NO: 1017:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 227 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1017:

GTTGAAAAC TATAAGATCA nATAAAGGTAA AACAGTGGTT TGTGTCATTA GTGGTGGTAA 60
 TAATGATATT AATCGAATGA AAGAAATTGA AGAACGTTCA TTACTATACG AGGAAATGAA 120
 GCATTACTTT ATCTTAAATT TCCCTCAACG TCCAGGTGCA TTGAGAGAAT TTGTAAATGA 180
 CGTATTAGGA CCTCAAGACG ATATTACTAA ATTTGAATAC TTAAAT 227

(2) INFORMATION FOR SEQ ID NO: 1018:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 284 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1018:

GTCTTACTTG CACAAGGTAT TATTTCTATC TTA CTGTTG CTTTCGCAAT CATGCTATAT 60
 ATCATTAAATA TTTTAGATGC ATATCGTAAT GCTGAACGAT TTAATCGCAA TGAGGAAATA 120
 AAGGATCCGA AGCGCGTATG GTGGCACATG GGACAAGACG TTCCCATACT TACTAATCTC 180
 ACCAGGTACA TnCTTATTGA TATTGTAGTG TAATTCCATT ATATTATGTT GGAGTAGCAT 240
 TACAATACAA TTATACACGC GCCTCGAGAC nACATAGATG GGTG 284

(2) INFORMATION FOR SEQ ID NO: 1019:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 779 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1019:

CAATCATCAC ACATAAATGT TCGAATAGGA TTGTTTTTAA GTCGTTTAGA CTCAGTTGTG 60

CACCTCAATA TGAGTTACAT GGTGATTTCG ATATGAATAA CCATCTTCTT GATTGTAAAT 180
 AAAACTATCT ACACCATTAT CGCTGTAAAG TCGTTTACCG TCTTTTGCAA ATTGGAAAAA 240
 5 TAAATAGGGT AATAGATCTA TCGGTATATC TAAATGATCA TGCTCATTTG ATAATCGAAT 300
 AGTAGTTGCA GAGTCATGTG GTTCGGAATG TTTGAAAAAT GGTGTCATAT TAATGACAAA 360
 TGAACCTTCT AACATGGCAC GTTTTTTATA TTTTATTTCT GAATTAAAG TAGGCGGATT 420
 10 AGTTTGTCCT TCTAGGATAG CaCGATTCCa TTCaTGaTTA TCTTCAAAGT CGATTGGTTT 480
 TGAACCATCa AATACACCTT TTTCTAAATC TTCGATGCTA ACTTTTCTAT CATCGAAAAT 540
 CCAAGTCGTA CTATCTAATG TTATAGGAAA CTTTACGGCT CCTTTAATTT GTATCATTTT 600
 15 CCCACTCCCT ATCAATGTAT ATAGCATTAT TTTAACACAA ATTGCTAACG ACACATTTTA 660
 AATCTACTTG CTTTTTAATA TTTAGTAAGA TAACTTTTA GTAAGACTTG AGAATTTATA 720
 20 TAGAGGGGGA GCGTGTCTATG GCGAAACAAG CAACAATGAA AAATGCAGCT TTGAAACAA 779

(2) INFORMATION FOR SEQ ID NO: 1020:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 950 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1020:

TTAATGGTCC ATTAAGAATA ATGGCAGAAA ACCGTTTGCA TAAATCAAAC CTTGATTCAC 60
 TAACTTAAGT AATACTCGCT TTTCTTAAAT CCTTTAGAAA GGAAGTATnT ATCATGATTA 120
 35 CTTCAATTCAG ACATTCTGAA GATATAGATA AACATATTAT AAAAACACCA TTAGATCATA 180
 CAGCGTCATG GATTAATGTA GTAGAnCCAG ACCGAGAAGA AATTGAAAAT CTTATGGAAC 240
 40 AATATAATAT ACCTGAAGAC TTTATACGTG ACCCTTTGGA CTCAGAAGAA AGTTCCCGTA 300
 TTGAATATGA CGAAGATACT GGTTACTCAT TAATCATTAT TGATTACCT ATCGTCAATT 360
 CAACTAATCG TAGCGTTCTA TCTTTTGTA CGATTCCATT AGGCATTATT ATTGGCAACG 420
 45 GTATTATCGT AACAGTTTGT GACGCTGAAA ATGAATTTTT AGAAAATTTA CCTAAGCGTG 480
 ATATTAAATT AAAATTTTAC AGCAGATTTG CATTAGAAAT TTAACTACT ATTGCCGACC 540
 ATTATAATCG TAACTTACGA TTAATTAAATA AAAGTAGAAT TCGTATTGAG AAAGAACTAA 600
 50 AAAATAACAT TACTAACAAA CAACTTTTCA AATTAATGGA AGTTGAAAAA AGTTTAGTAT 660
 ACTTTTATAGC TGCCTtAAAA GGTAACGATA CAATTATTAA AAAGTTATTC CGTTTACCTG 720

AAGCCATCGA AACAAACAGAA TTACATCAAC GTATCTTAGA AAGTATCACA ACATCATACG 840
 CTTCTTATT ATCTAATGAT ATGAATACGA TTATGAAGAC ATTAACACTT TTCACGGTAC 900
 5 TATTAACgTT ACCAAyActc GTATTTAGTT TCTTCGGTAT GAATGTGTCG 950

(2) INFORMATION FOR SEQ ID NO: 1021:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 528 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1021:

AATATATAAA ATGAATACAT TGTGAGGCAA TTATCAAATG AAATTTAATA AAGTAAAACT 60
 20 AGTTATACAT GCGTGTGTAC TATTATTTAT CATTATTTCT ATAGCGTTAA TTTTTCATCG 120
 ATTACAGACG AAGACACATT CTATAGACCC AATACATAAG GAAACAAAAT TATCAGACAA 180
 TGAAAAATAT TTAGTGGATC GTAATAAGGA AAAGGTTGCG CCGTCTAAAC TAAAAGAGGT 240
 25 ATATAATAGC AAGGATCCTA AATATAAGAA AATTGACAAG TATTTACAAA GTTCATTATT 300
 TAACGGTTCA GTAGCTATAT ATGAAAATGG CAAATTGAAA aTGAGTAAaG GTtATGGaTA 360
 TCAAGaTTTT GAAAAAGGTa TTAAAAaCAC ACCGAaTACG aTGTTTTtAA TnGGTTCAGC 420
 30 TCAAAAATTT TCAACAGGGT TACTGTAAAA ACAGTTAGAA GAAGAACATA AAATAAATAT 480
 CAATGATCCA GTAAGTAAAT ACCTTCCATG GTTTAAAACA TCTAAGCC 528

(2) INFORMATION FOR SEQ ID NO: 1022:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 713 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1022:

GCATThCGGT TAAAgTAKGt TTCAGCTTCT CTCaTTTTAG AAGTACCGaA AAAtTGGTTGG 60
 TTAtCTGGAT TTAATrtCAC GATAAATATT GCTTACTTTG TtACTTTGTr AAATGTACCC 120
 ATTACGAGTC TCAATGTTAT TCCAATAAAT ATCACTTGTT GGTGCATGGT TTGGATATGC 180
 50 ACAATGATTT CTGAAATTG TTTGAACGAT TTCTAATGGA TCACAGCCAA ATGTACTGTT 240
 TAATACTTCA GAGTCTCTGA ATAATGCACA AAnTGAAATA CAAGTTGTCC AGTTTGGTAA 300

AGTATCTTGC GTATAACCAG CCTCTATACG AACCATTTTA AATTTTGTTT GAATTAAATC 420
 TGTAAAACTC TGTCTATCCA TTCTGTTATC TACCTTTCTG TTTGGGGAAT TTTATCCGGA 480
 5 CACAAGAAAT TGCAATAATA CACATTTCTT GAAACACAGA TTACATCTTA ATATATTTTT 540
 AATAAAATGA AAAGAGTCAA TTTCACATTT GTATTAAATT TTGATCAAGT CAACAAGAGT 600
 TAAGTTTACT TTATAATGAA GCGAAAGTAA ATGAAGTAAA ATTTTATGCA TAATCACTAG 660
 10 ATTTGATAAA ACTTACACTT TTATAATGat ATCAAATTTA CAAaGGAAAA CTG 713

(2) INFORMATION FOR SEQ ID NO: 1023:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 570 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1023:

AATAAAATAG AAATGATTAT GGGTACAATT ATCGCTATCA TATCCTTGTT ATTAATTATA 60
 25 TTACAAGCAT TTAATATTAC TTGGGGCGTT ATACCAATTA CAAATTTTGG ACATCAATTT 120
 TTCTTTTTCA TTGGTATTAT TTTAGTAATT GCCGGCATAT TTTwyAAGCG ACTtGAGTTT 180
 TCGGGaATcG GGTtATTATT TTGTcAAAAA ACCGTCGATG CAATGATTCA TAATCCACAA 240
 30 TCAGCCCAGA TTTTTTCATT AATTATATGG ATATTATTAG TAGTTCTAGT TATATATTTT 300
 ACAATTAGAT TATCTTCACG TACAAGATTA TAAATATGAT AAAACTATTC ACTTGaTTAA 360
 TTGTATTAAAT TGaGATGaAT AGTTTTTTTA TTGTTGGAAT AACTTTTGGT AATTTATAAA 420
 35 TAATTTAAAA AAATTGTTTA TAAAaGGAAG CGTATATAGA ATGAAGGTTG GGTATATAGT 480
 TTATTGAGGG AGGTGTCACA ATGAATAAAG TCACAaTTAA TCCTCAAATC CAATTAACCT 540
 40 ATCAAATTGA AGGTAAAGGG GATCCTATAn 570

(2) INFORMATION FOR SEQ ID NO: 1024:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 487 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1024:

CTTTGTTGTG CTTGAGCATT ATTAAAAAGA GTATTAAAT TTAGTTGTTG GTTTGTAATA 60

TCAGAATTAT TAACACTATA TTTCCCTTTA AATAATGGTG ATTCGrAATA ATGCTTATCT 180
 TTATCTGCAG CTAAGTGGAA TTkCCCTAAT GCAGAGTCTG CGATTGTTGG TTCAAGATTA 240
 5 ATCATTGATT TCTCTTTTTT AGGATCATGT CCATATGACA tGTaATTTTC GATGCATTAA 300
 CAACAGATTT AkGAATGCCA AGCCCTTTAA CAATTTcATC TGATGCATCT GCGCTTAATn 360
 CTAATGAAGA TAAAAACGAt TAAtCTTTCAT CkKTTCTTGG AACTTCACTT CATTTTCAAA 420
 10 ACGGTCATTA AAATAATCTT TATACATTTT TGCTGTTTGT TGTTCACTTT TTAGGTATGT 480
 ATTTTTC 487

(2) INFORMATION FOR SEQ ID NO: 1025:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 364 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 20 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1025:

25 ATATGTTATA AACAAATTTTA CAGTTGTATC ATCTACTCGT TCTATTCTCA TATCATCTCA 60
 CTCCTTACAG TCGATGAATA GTATCCACAT TGTATTAAAG CATCAAACAA AATACAATTT 120
 ATTTGTTTGA TTTCTTTCTC TAAAmTATTT TGGTAACTTA TAATAACATA TTCGTTGTAG 180
 30 CAAAACTATT TAAATGATTT ATACAGTTAA AGCATTAAAG CACTTTCTTA ATTTAATTTT 240
 ACCTTATCAT AGCAAATGTT TCATCCAAAA CACTCTAATA TAGAGCTATA TTAACAATTG 300
 CACATTtGaT TTAAGGATA CTAAGCAATT ATTGtAAAAT TAAAACCAAA AAaGCAACAC 360
 35 TATA 364

(2) INFORMATION FOR SEQ ID NO: 1026:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 333 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 45 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1026:

50 TGCCCCAGGG GAGTAcnAAA AAAAAGnGGG GTGGGGAATT GGAAACCGGA ATTAGTGGTT 60
 AAAGGGGTTT ATTGGATGTT GGGTCTAAAG TATTCCcAGA AATTTATCCA TCnATGATTG 120
 CTTTAGCCAA GTTTTTTTCC AACCCATCTT TATGGAATTT AGTTATCTCA ATTACATTAA 180

CTTATATAAA AATGGCACAA TTATTTTCATG TACCAACAAG AACAAATATTA ATACGTCATT 300
 TAACACCTAA AATTATACCG GCTATTATCG TTG 333

(2) INFORMATION FOR SEQ ID NO: 1027:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 450 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1027:

TGTTCCATTC GTTTAAATAA TGGTGATACT GTACCAGTAT CGAGTGCTAA TTCAGTTACG 60
 ACTTTCTTGA CGTTTACAGG AGATTCATCC CATAAAATTG TTAAGACAAG AAATTGTGGG 120
 TATGTTAGAT TGTACTTCTT AAAAACTTTG TTAGAGTAGT AGCGATTAAC TTGTCTTTGA 180
 GCATTGTACA AACTAAAGCA TAGCTGTTCT TTTAAATTAT GTTGATCAGA CATTAAAGTT 240
 CTCCTCCAGA CATACTATCC GTTTTTnTCT CTTTTCGGAT TGGTAATCAT TAAAAAGTTG 300
 ATTGTTTATT AATTCACAAC TTTCTTTGAT TCAATGCCAT GCnAAAATTA AAGTATGTTT 360
 AAAGTTTAGA AGATATTTTT GATTAAATCA AGCAAAAAGA TAATTTAATA TATATGTGAT 420
 CATTTTTAAA AATAACTGTn ATAGAAAAGA 450

(2) INFORMATION FOR SEQ ID NO: 1028:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 535 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1028:

TGCATCTATA CCTAGAACTT TAATTTCCGA TTTTATTGCG TCTGTAATAT CTTTAATACC 60
 ACTTTCGATA GGGAACTTT CGTCACCTTC AACATATTTA ATACCAAAGC CACCACCAAG 120
 GTTTAATAAT TCAACTTGAA TGCCTTGctC TTTaAGCCAA CGTAAAmCAA TTTTAGCaGT 180
 TTCAATAAAAt GCTTCTGTAC CTTCAAtCTG TGrACCaATA TGACAATGTA CACCTTTTAA 240
 TTTTAAGTGT TTAGATTGTT GGACTTTGTC AATTGCTTTT TTAGCTAAGC CATATTGaAT 300
 TGaTAATCCA AACTTACTAT CTTCTTGCCC AGTTTGaATA AATTCgTGTG TATGTGCTTC 360
 aACACCTGGa TTAACCTGTA AtACAACCTG aACCGTATCA TTAGCATAGC GGTCTATTAA 420

AATTTTCATGT TTCGTTTTAT TGTTACCATG GAAATGGATG CGACTCGGTT CAAAA

535

(2) INFORMATION FOR SEQ ID NO: 1029:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 359 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1029:

GAAGATGATT GAATTATGGA ATTTTTTTTCG AGATATGTTA TTTCGGGGAT CAGATTTTGC 60
 GATTTTGCCT TGGATAGAGT AGTTGCGATT TGTAATACG TTTTCAGGT TCGATTCAAT 120
 TTCGTTGTTA AGATAATATG GATTAGTTTC ACTGACATGT TGATGCATGT CTTTTTTGTT 180
 CTGATAAAGT ATAAAATGTT TACTTAACAT TACTTAGTAT GACACCTGCT AATTCAAACA 240
 TTATTTGAGA CATTCTTTTC AAATTAATTA TAAATTTTTC CcATAGACT AGTTTGATAT 300
 TTATCTACAT CTCAAAATTC TCATCAACAA TCTGTCACAT CCAACATTTT TACTTnAGT 359

(2) INFORMATION FOR SEQ ID NO: 1030:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 341 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1030:

TACATTGGTA AATAATTCTC ATAGTTTATG TCTCGTTGAT TAATCCAATC ATTGTTTTTA 60
 TCGGGTAAAA CATTCAAAC TTTCAAATTC ACAATTGATT GATGTTTCAT TAAAGTATCT 120
 AATTTTTGCT CTCTAGTTAA ATATTCACCA ATGTCATTAT AATAGATATC GTGATTGTAA 180
 CTTCCATCTT TAACTAAAAT AGATATAGCT ATCGGTGCTC TACTTCCTGA TCCAAATATT 240
 TTTCCACCTT CTTTTCTTga TTTTTCACCC TGTGTTTCGTT GGTGCGCTCT CAAATTAATT 300
 ATGtACAGaT AGTTAAATTC ATCGaTAAAA CTTTTCTAAA T 341

(2) INFORMATION FOR SEQ ID NO: 1031:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 326 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1031:

GTCTAACTTT AATGTTTAAA AAnCTTAGAA ATTTTCTACT CATAAATGGA TGCTTTATGG 60
 5 AATATTATTA ACAGGCCAG CTTCAATGCT AGCTATAGAA TTTGGATGGT TCTTAACAGA 120
 GATGGGTAGA CAGCCTTGA TTGTTCTGG TTATATGCGC GTGGCAGAAG CAGCAACACA 180
 GCAGCGGAAT AACCTTCGTT ACAATTTTAT TTGGCATATG TACATCATTT AAGTATACAG 240
 10 TGCAACGTAT ATCGTAGTTA AAATAACCGC GTAGAGAGTA ACGTAGCAGA GCAGAGGAAT 300
 GAAAnATTAG CTTATGnAAC GGTAGG 326

(2) INFORMATION FOR SEQ ID NO: 1032:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 263 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 20 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1032:

25 ACAATCAGGC TTGTGAAGAA TGAATTGCAT GACGTTTGTG TAATTGAACT GCGAGGTTTA 60
 ATTTCTAAAA TGCTCCAGnC CTCCAATGTA ATCGCATCTT GATATAACAT AGCGATCGCT 120
 TGATTTGTCG TTGTATCAAC ACCTCTAAAC AACGTTTCAC CTATTCGGCA ATTCATTTAT 180
 30 TTTACCCAAA TCATTATATA AAAGTTGTGG TAACATGCTC GAAATACCAC CTGAAATAAT 240
 nTCAATCGAT ATCCTATTTT TCT 263

(2) INFORMATION FOR SEQ ID NO: 1033:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 514 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 40 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1033:

45 TTTCTATAGA GGATCCTGTA GAGATGCAAA TTCCTGGTAT CGTCCAAATT AATGTGAATG 60
 ATAAAGCTGG CATAAACTAT GTAAATTCGT TTAAAGCTAT TTAAAGATGT GATCCTGATG 120
 TTATTTTAAT AGGTGAAATC AGAGATAAAG ATGTTGCCAA GTGTGTTATA CAGGCTAGTT 180
 50 TAAGTGGTCA CCTTGTTCTG ACTACATTGC ATGCAACTGA TTGTAAAGGT GCTATTTTAA 240
 GGCTATTAGA AATGGGCATT TCTGTACAAG AATTGATACA GGCAACTAAC TTAATTATAA 300

AGCAACAACCT CCGATATTTT TTTTCCCaTA ATCATTtCATT ACCATCATCA TTTAAGAACT 420
 TAGAAGATAA ACTTGATGAT ATGACAAAAG CAGGTGTCAT TTGTGAAACT ACAATGCATA 480
 5 AATACATTTA AACTACATTC TAAGAAGCGA CAAT 514

(2) INFORMATION FOR SEQ ID NO: 1034:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 598 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1034:

TTTTTCACGA ACATTTTTGT TTAAAATTTT CTTTCTTAAA CGTATACTTT CTGGTGTAAC 60
 20 CTCAACAAGT TCATCATCAT TAATGAATTG TAACGCTTCT TCCAATGTGA GAATACGCGG 120
 TCTATTCATT GTTTGTGTTT GGTCTTTCGT TGCAGAACGT ACGTTAGTTT GATGTTTTGT 180
 TTTAGTGATG TTAACAGTTA AATCATTTTC ACGATTATGT TCACCAACAA TCATACCTTC 240
 25 ATAAACTTCA GTACCAGGTT CCATGAAGTT TACACCTCTA TCTTCAAGTC CCAAAATGGc 300
 ATAAGTACTT GCAGAACCTT GATCCATTGA AATTAATGCA CCATTACGAC GACCGCCAAT 360
 TTGTGCTTTA ATACGTGGTC TAAATTCyTC aAATGTATGG TTAATAATAC CGTAACCTCT 420
 30 TGTCATTGAC ATAAATTCAG TCGTATAACC AATCATACCA CGAGCCGGTA CATTAAAGAT 480
 TAAACGTGTA AGTCCATTAT CAGTTGTAGT CaTATCAACC ATTTACCTT TaCGTGcACC 540
 TAAkGATTCa ATAACAGCAC CTGcATTTtC TTGTGGCACT TCACATTGCA CACGTTCA 598

(2) INFORMATION FOR SEQ ID NO: 1035:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 313 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1035:

AAACAGTGCT TCATTATCGG TATTGATATT GATCCACAAG CCGTTGACCT AGGGCGCACA 60
 ATCGTTAACG TCTTAGCACC AAATGAAGAT ATAACAATTA CGGATCAAAA GGTATCTGAA 120
 50 CTAAAGATA TCAAAGATGT GACGCATATC ATATTCAGCT CGACAATTCC TTAAAGTACC 180
 AGCATTTAGA AGGAATTATA TGAntTAACC AATGAAAATG TCCGTAGTGC CATGCGCCTT 240

AAGTGGGCCA TGT

313

(2) INFORMATION FOR SEQ ID NO: 1036:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 235 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1036:

15	AATAATGAGT AGGTTTTGAT TACTTACGAG ATAACATGGT GAATTATTCT GAAGATAGAC	60
	TAATGCGTCC ATTACATTTT GCAATCATTG ATGAGGTTGA CTCAATTTTA AATCnACGAG	120
	GnCGACGCCA TTAATTATTT CTGGTGAAC TAAAAGTCAA CGTCACTTTA TACACAAGCA	180
20	AATGTTTTTG CGAAAATGTT AAAACAGGAC GAAGATTATA AATACGATGA AAAAC	235

(2) INFORMATION FOR SEQ ID NO: 1037:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 263 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1037:

30	nCAATATACC TCCTATCATC ACACAAAATG CGTTGTTTCG TATGATTTTC TCAACATCGT	60
35	AGACTAATGC AATCAGACAC AACACCATGC TCTATATCCA ATATTTGCTT TATTGCCTAT	120
	CAATGAGCGT ACTGCGTGCT TTAAATAAT CATCATCAAT TAATGACTGT ACAGGCACCT	180
	CATGAAAATT ATCATCCGCC AAGTATTGCG CACGATCACT ATATGCTAAA TGCATCGCTT	240
40	GTATCAnATG ATGCAAGTAA TCA	263

(2) INFORMATION FOR SEQ ID NO: 1038:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 218 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1038:

55	ATTGTACCTG GCACAATCTC ATTATGTATT GGATTATCAT CATTACGAGC GCCAAATATT	60
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ACCGTTATGA CATGTTGATC ATTTTtAGTn AATGTTAAAG CTATAACGTG TGATATTGCG 180
 AGTCTGTCGG CATTCAATAT CTTChAAATG CCCTACAT 218

(2) INFORMATION FOR SEQ ID NO: 1039:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 396 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1039:

GTTTAGACGC TAATGnTGGC ATATATTACT TGCCATGCAA ATGAGTCATA AGGCATAGTT 60
 TTCAAGAAGG GTTCTGACAA TGAAGTGAGC AACATGTCAT GATGAGAAGC AGGACTATAC 120
 AATGAGAATA ACCTTTTtGAT TTTTCATGCA TAAGGCGATT CAATCAAAAAG CAATCACCTT 180
 CCAACTGAAT TGTCATTTTtG TAAAATAAAA TAATCGATCC AATCGTTATC TAATTCATAA 240
 ATGTGTAAAC ACATACGTTA TGAATGGATA ACGATTTTTT GTTATGTAA AGTGGTACAT 300
 TAATCATGTA TTTCGTATGA TAATTAACGA CAAGTGTAAT GGTtAAATGT ATTTTATGGA 360
 TGGAAATGCh ATAATAGGCC TGGGTTACCA TGGnGC 396

(2) INFORMATION FOR SEQ ID NO: 1040:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1040:

AGCATTtTGT TtAAAAGCTG ATGAAGCAAT AATAAACTCT TCATATCCTC TGTCCATTAC 60
 AATTTGACCT TGATATACAA TTTCTTTAAA GTTTTCGATT TCTTTAAATT CTCTGCTATC 120
 ATTTAAAATA GGTGCATTtCG TAATAACATT CGCTTCCTTC TTATATCCTT TAGATTGATA 180
 ATATTCtTTTT GCTGCATGAC TtACTGTTAC GAAGGCATTA ACACGATGTT TtACTATGTG 240
 TTTTTCTATA CTTTCTACAA ACTTTGAAAT AAGTGGAAct TTATTAAATA AGGCATTtTTT 300
 CGCATATATt TCATGCGCAT CATAAACAAAT ATTAGCTTTT TtATAATTGC TtAAATAGAC 360
 CATTAATAAT ACGTCGAAAT CATTTGCATG AATCACGTCA 400

(2) INFORMATION FOR SEQ ID NO: 1041:

(A) LENGTH: 268 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1041:

10 ACTTGCGTTT CTATTTAGCT CAGACAGGAA AAATATTCGC TGGAAATATG TAGGAATTTT 60
 ACTTGCAATT CAGCTTATCT TTGCATTTAT CTTGCTTAAA ACTACAATGG GAATCAAGGT 120
 TATTGGTGGT ATTTCAAACG GTTTTAACTA CTTATTATTA AAAGCAGCAG ATGGTGTTAA 180
 15 CTTTGATTTC GGTGGTATTC AATATATCGT CCCTAAGCAC CCACCCATTC CTCCTCCGGG 240
 GAATAATAAC CAACnGAATT AATTCCGn 268

(2) INFORMATION FOR SEQ ID NO: 1042:

20

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 277 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1042:

30 GTGAAGATAA GAAATTAAAG TTAAGACAAG GTTAAAAATA AGCAAAAAAT ATTGAAATTA 60
 CAGATCATTG GAnTGGTATT CCAGAGGAAG ATCAAGATTC ATTTTGTATC GCTTTTATCG 120
 ATGGATTAAA TCTCGTTCAA GAAGTCAAGC GGTAATGGAC TCGATTATCT ATTGCTCAAA 180
 35 AAATCATCAA TTAAACGGnG ATCGATTAAA ATTAAAGTGA ATTAACAAGG AGCAACGTTA 240
 AATCTATTTT AATCAGACTG AGACGTCATC AAGTCAT 277

(2) INFORMATION FOR SEQ ID NO: 1043:

40

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 379 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1043:

50 TTATCATCAC AAGTGATTTT GAAAATAAAA AAATCGAAGA TGATGACAAT GATTCAGGTA 60
 GTGTGCCGAT ATTGCCGTTT ATTAAACGAG ACAAAGCATA TCAAATTATC CAGAATTTAG 120
 TACCAGATTT ATCTTATCAA CAAGTTAATG AAGGTATGCC TTTGTCAGGn TTCCACAGAC 180

55

AACCATTATT ATTGTTATTA CCGATATAAC CATAGTCATA TGGTTATTGT GATCCAAGGT 300
 ACCTTATGTC AACAGCGGGT TAAAGCAGAG ACAATACATC AGATTCCGGCA TGAACGAAAT 360
 5 TATATTTAAn GCTnCTAAG 379

(2) INFORMATION FOR SEQ ID NO: 1044:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 399 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1044:

ATATTGAACT TGAAGACCAT GCAGATATAA ATGAAATAAC ATATCGATTA TCAAAAATTT 60
 20 TCGGTATTAA ATCTATTAGT CCAGTATTAA AAGTAGAAAA AACATAGAG GCAATAAGTG 120
 CAGGGACAAT TAAATTTGCG CCATTnTGAA GAAAACAGCA CATTTAAAAT TGATGTGAAG 180
 CGTGCCGATA AAAATTTCCC AATGGATACG TATGAATTAC AGCGTGAATT GGGTGGTGCA 240
 25 GTATTGAAGC ACTTCGACAA TATTTCAGTG aATGTCaAAC GTCCAGATCA TGgAAATTCg 300
 AGTGGGmAGT TtAGGmTTAG ATGCCAATTT TATATGGTAT GnAAGAAGTT GGTTCGGGG 360
 30 TTCCAGGTGG GATTTACChG TTGGGTACTG GTGGGTnAA 399

(2) INFORMATION FOR SEQ ID NO: 1045:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1045:

AnGATAAACA GAGGAGCACA AAAATGAATn nAAATATAAT CATCAAAAGT ATTGCGGCAT 60
 45 TGACGATTTT AACATCAATA ACTGGTGTCTG GCACAACAGT GGTTGATGGT ATTCAACAAA 120
 CAGCCAAAGC AGAAAATAGT GTGAAATTAA TTACCAACAC GAATGTTGCA CCATACAGTG 180
 GTGTTACATG GATGGGCGCT GGAACAGGAT TTGTAGTTGG GAATCATACA ATCATTACCA 240
 50 ATAAACATGT TACTTATCAC ATGAAAGTCG GTGATGAAAT CAAAGCACAT CCTAATGGTT 300
 TTTATAATAA CGGTGGTGGA CTTTATAAAG TTAATAAGAT TGTAGATTAT CCTGGTAAAG 360
 AAGATATTGC GGTCTGACAA GTTGAAGAAA AATCAACGCA 400

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 626 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1046:

ATAAACTTCT ACACCATCAT CTTTACCTAC AACATTTGTA GCTTTAACTT TTAGTCCAAA 60
 GTTATCTTTA AAGAATTGTT CACCTACTTT TTCAAATTCT TTACGATGCT TCTTCACAAA 120
 TTCAATCGCA TCTTTTCTG CAGGTGGTTG AAAGCCTTGT CCTACATATT TTGAAGCTTC 180
 CATTTCTTCT GGTACTGATT TTGTTTCTGT ATTTGTTTCT GTATTTGTTT CTGTATTTGT 240
 GTCTTTTTTT GATTCATTAT TCATCGCTGA ACATCCTGAT AACAGTAGCG TTGCTATTAA 300
 GATTAATTC GCCTTTTAA ACATAGCTCA TCACCCATTT ATGTGkTTAT ATAGAATATT 360
 AAAAAGCATT TTAAAAA TTTATTCATC TTTACGATAC ACTCCATATT CTATTGGATC 420
 ATTATCATCA TAAAAGGCTT TTTAGTATT AATAGTAGGC TTTCTATTT GAATTGTAAT 480
 TGTAGATTTT TCTGGCTTAT TTTTAAAT ATATAGTTTA TCACTCAGTT CAATTACATC 540
 ATCAACTGTA TTGTCTTTAG TAAATTTTC CTTTGTACTA AACAAATGTTG TTACTGTATC 600
 TGTATTAGCA GCGnAATTCA CTTCTT 626

(2) INFORMATION FOR SEQ ID NO: 1047:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1047:

GACGGCGTTC AAAATGCAAC GGTCAATTTA ACAACAGAGC AAGCTAAAGT TGACTATTAT 60
 CCTGAAGAAA CAGATGCTGA TAACTTGTC ACTCGCATT C AAAAATTAGG TATGACGCGT 120
 CTATTAAAGA TAACAATAAA GTCAACGTCA CGCAACTGAA GCGTACAACA TAAATTGATA 180
 GnTATCATAT CAGCAGTATA TCTTACCACT ATAATGTAAT GTTGACACTT TCATATGCAT 240
 ATACAGACTA TTACGATCAT GTCCATTAT TAGCnCACTG TCATTATATG GTGGCATTAT 300
 GAGGGTATAA ACTTAGn 317

(2) INFORMATION FOR SEQ ID NO: 1048:

(A) LENGTH: 223 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1048:

10 ATACGnATTA TGCAAAAAAT AAAGTGAGAT TGGCATATGT GTAAATCTAA AATACTGTTG 60
 AAAAATATTT TTAGTGAAGT AATCAGAAGT TAAAGATTTA ACTGAAGTAA AAATATAATC 120
 AAGATTACGA GTCATTAACA TTTAGCTTTA AAGAGGGAAA CATATCAAAG TAGGTTAGCT 180
 15 AAGnAAAACA CCGACTAAAT CGGGGATATT TCGTGACATG TTG 223

(2) INFORMATION FOR SEQ ID NO: 1049:

(i) SEQUENCE CHARACTERISTICS:

20 (A) LENGTH: 608 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1049:

AAATATGAAT AATGCAATTG ACCAACGTTT GATAACGTTG CCATACCCAT ATTAAATTTT 60
 30 GTATAACCTT GTTCTTTACT CCAAAGTAAC ATATGCAAGT ATAGACCATC CATTAATGGT 120
 AAATCTAACT CTGGCAACCA TCTAATTAAA TCGACTGAAA TGGCATCATT AAAGTATGTT 180
 GGCATTAAAC TACAAAATGC AATTACTTCA TTTTCTTCAT TTCGCATTAC ACCAATTGGC 240
 35 GCTTTAGATA AGTATTCTTC ATTAAATnCA CCAACAGAGA AATGCATTTC CyGACGATTA 300
 TCTAGCCaTA AATcACTTAC ATGTTGAAGt TCATTTAtAA ATTcAGTTGr AAACGGtGGt 360
 TCAATAATTT CGAACGAAAT ATTAAGTTCA TCGAATThAT TTAAAGTCGC TCTAAATCCC 420
 40 ACGGCGTTTT TTACCTGAAG TTGAAAATTG CGTTAAATCA ATAATTGCTT CTTCACCTAA 480
 TTTGAAAAAT TGGTTACCGG nATTATGATA TAAAGGCATG TGTTGATCTG TAACTTGATA 540
 45 GAATATAACA TCATAGCCTA AATACTCAGC GTAATTATAG AATGCTTCTA ACAATTCATC 600
 AAAGGCAT 608

(2) INFORMATION FOR SEQ ID NO: 1050:

(i) SEQUENCE CHARACTERISTICS:

50 (A) LENGTH: 292 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1050:

5 TGT TTTTCTA CGCTAAACTA TATGATAAAT TGCCTATGTA TTTACTGGTG TTTATGGCCT 60
 TTACAGCTGT AATTTTGATT ATGATGTACA TACAAGAGAA AAATGAAAAT TACAAAGTTG 120
 AAAAAAGATA TGTGGTTAGA TATCTCACAC TTAACGTTAT TGTGGGATAT ACTTTGCCAT 180
 10 TGCTTTTGT ATCTATTAC GTTTTGGTG TAGTCGGTTT TGGATTGAT GTTTTCAATT 240
 ATTGTCTAGG TaktATCTTG ATGTyATwTA TTTCTTGGTT TAGGTnTATT nT 292

(2) INFORMATION FOR SEQ ID NO: 1051:

(i) SEQUENCE CHARACTERISTICS:

- 15 (A) LENGTH: 734 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1051:

25 TAAATCnTCA AAGATTTCTT CTAAACATT ATAATCTTCA ACGATACTCG AATAATAATA 60
 CAGCTCATCA TTTCTGGGCT TGGTATAATA AAATATAACT TGCCACCTC CATCGTCCAC 120
 ATATGCAATT ACATATACCT TTTCCCACTC TACTGGTATC ATTTTCATTGA TCTCATTTGC 180
 AATTTTATTG TACATTTAC TTAATTTTTC TTCGAAATTC ATGTTATCGC CTCTATTGTT 240
 30 CAGCTTCTTC TTGCTCTTTA ACATATTGCT CGATTTCTTT AACTTTATTA ATTTTCATATT 300
 CCGTTTCTGG TAAATTTCCA AATTTTCTAT ACTTATAGTA ATTTTGTCGA CCTACTTGAC 360
 CAAATTCTGA ATTTATCCAA TCAATATAAT CAAATGAAAC TTTTAATTCA CCTTCTCTTG 420
 TAAAGTCAAA TTCGCATGAT GTCCATGGTT CATGTCCTTC TTCTTTAAAT AAATTCCTTA 480
 AATTTTGAAA TTGTTTATAC AACTCATACA CTGAaTCCAT AAATCCGAT TCCGATATAT 540
 40 CATATTTATT TAATACACTA GTATAGTAGT ATAATTCATT ACTTCCAGGT TCTGTGTAAT 600
 AGTAGAACAC TTCTCCTCCT CCGTCATCTA TATATGCCAT TGCATATACC TTTTCCCACT 660
 CTACCGGTAT CATGCTGCTA ATCTTATTCG CAATCTCGCT ATACATTTCA CTTAATTTTT 720
 45 CTTCGAAAGT CATG 734

(2) INFORMATION FOR SEQ ID NO: 1052:

(i) SEQUENCE CHARACTERISTICS:

- 50 (A) LENGTH: 775 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1052:

5 ATTTTTAACC AAAATTGCTT TTTTATCTGA AAAGAAAGGC AATGTTAATG TTTCTTCAAC 60
 AATTGGTGCA ATCTCTGTTT CGTATAAATT ATATTTTACA AAGTTAAAGT CATCTCTATC 120
 ACTTTTCAAA AATTGTGATA TGATTTCTGC ACTTTGTTTT TCAACCAATT CAGGCACATc 180
 10 TCCATAAATa GCTACAATAT TGTCGCTCAT TCATTACACC CTTTCATTCTG TTTGACACAT 240
 CAATAGATTA TATCATGTTT CTGTATCTAT AAACCACTTG CATTTCCATA AGAGCTTGAA 300
 TCAACTTTTA AATTATCATC TAAGTCAATT GTAACCTTGAC CGTTTTtGTTG ACTATTGTAA 360
 15 ATGCGtACTG CGAATCCTTT GCAATCGTTt aACAACCTTCT ATATTAGGaa GwTGATACAT 420
 ATTGTTCTTC CCAGAAGAAA TCAAACCTTAT TTTAGGCTTA ATCATCTCTA TAAATTCTTT 480
 AGAACTACTT GTCTTGCTCC CATGATGTCC TACTTTTAAA ATATCAATCT CCGGCAAGTT 540
 20 ATATTTTTTT AGTAGTAAAG ATTCATTATT TTTACTAGCA TCGCCCATTA ATAAAACCTT 600
 TTTATTTTGA TATGTAATCA TAGTAATAAT CGAATACTCA TTTTATCTC GGCTATTTGG 660
 AATAAACTA TCAAAAAAAT AGAAAACTAC TATCTCCAAG TTTAAACTA CTAACCTGTC 720
 25 TTACATCCAT AAGTTTAATG GTTGTACTTA TGGGCTTAAT TTCCGATAAT AACCA 775

(2) INFORMATION FOR SEQ ID NO: 1053:

30 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 234 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1053:

40 GAGACCAATC ATCATAATGA ACGACAATCA TGTATTTAAT ATTTAATAAA ATACTGAATA 60
 ATGCTATAAC TGCCATTAAT TGAAGACCAA TCGCATCTAA TGCGACAACA CGATCGGCAA 120
 GTGATGGGCC TAGCACAACG CGAATGAGCA TAGCTAACAT AGGAnGTGAC AACTATGATT 180
 AATGCAATAA CGATGAATAA CCTTGATGAn TCATTATAAT TCGCCACCT CTCT 234

(2) INFORMATION FOR SEQ ID NO: 1054:

50 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

CTACTGGTAT CATCCACTGA TTTCATTTGC AATTTTCATTG TACATTTGAC TTAGCTTTTC 60
 TTCGAAAGTC ATGTTATCGC CCCTATAGTT CAGCTTCATC TTGCTCTTTA ATATATTGCT 120
 5 CGATTTCTTT AACTTCTTCC ATTTCGTATT CCATTTCTGG TAAACACCA AACTTTTTTAT 180
 ACATATAATA GTTTTCACGG CCTAATTGAT CAAACTCTGT ATTTATCCAA TCAATATAAT 240
 CAAATGAAAC TTTTAATTTA CCTTCGCTTG TAAAGTCAAA TTCACTTGAT GTCCATGGTT 300
 10 CAAGCCCTTC TTCTTTAgAA AGTTTCTCTT AACTTCTTAA ACAATCTATA TAAATCCGTC 360
 CACAAATCAT AAAATACTTT TTCAGAGACA TTATACTCTC 400

(2) INFORMATION FOR SEQ ID NO: 1055:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 333 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 20 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1055:

25 GnGGCATATA TAGCGTTGGC GGTATAACAA AGAAAAATGT GAGATCAGTG TTTGGATTTG 60
 TAAGTAATCC AAGTCTACAA GTTAAAAAAG TTGATGCTAA AAATGGCTTT TCGATAAACG 120
 AGTTGTTTTT TATTCAAAAG GAAGAAGTAT CATTGAAGGA ACTGnACTTT AAAATAAGAA 180
 30 AACTCTTAAT CGAAAAATAT AGATTGTATA AAGGAACGTC TGATAAAGGT AGAATTGTTA 240
 TCAATATGAA AGACGAAAAG AAGCATGAAA TTGATTTAAG TGAAAAATTA AGTTTTGAAC 300
 GTATGTTTGa TGTAATGGaT AGTAAGCAAA TTA 333

(2) INFORMATION FOR SEQ ID NO: 1056:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 347 base pairs
 40 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1056:

TGGGCAGTTA CATTTATGAT TATCAGCACA TGTTAGCTT ATAAATTTTT ACGAAAGTTT 60
 AGCCGTTTAT AAAGCACATG CATAATGAAA CGAGTATTTG CCACTTGATT AGTACTTCAT 120
 50 TATTATGTCG AAAATAAAAA TAAGTGGTAT TTTAATATA TTAAGAAGCA CTCATAATCG 180
 GCTGTTAATT AATAATATTT TTCATAAGTA TTGATTCATC ATTTTCTTTA TGTTAAATAT 240

TAATACAGAT ATCAATATGG CnAAAGTGTT nnATGAATCA GAGGTAA

347

(2) INFORMATION FOR SEQ ID NO: 1057:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 312 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1057:

TCCAAAACGG AGAGCCAAGA GTTAACTCTA CTTATATAGG ATACGCGCCA ATTGATGATC 60
 CAAAATTAGC GTTTTCAATT GTATATACAA ATCAGCCTGT ACCACCACCA TGGTTAACAG 120
 GTGGAGACTT AGGTAGAGAT GTAATTAACT ACTACTTTAA GCAGTTAGGT AAAGATGATA 180
 AAAATAAAGA CAAAGACAAA TAAAATTTAA CCTGACGATT GTGTAGCGCA TGGTTGTAAA 240
 ATTTTAACTT TGCmAATATT ATAGATGTTG GTATAATAAT AAAGTCGTAT TtAGaAATGA 300
 TwAGGaGGGA AT 312

(2) INFORMATION FOR SEQ ID NO: 1058:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 404 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1058:

GCCATTTTGC GATGCTAAAT CCATTGAAAA TGCAATACCT GAAAGTCCAC CAAACAAAGA 60
 ATTGTTATAT TGACCACTCT GTAAATATGG TGCTAATTC ATGATGTACT TATGCACAAT 120
 TTGCTCAGTA TTAATATCGA AAACTTTTTtG AtAAGCATCT AAAAACAAAA TGATACCTGG 180
 TATACCATGT GATAAAGTTG AAGGTTCAAA ATAATCGGTT TCAGTAGATG CTTTTGAAAT 240
 GAAATCATCT ACTTCTGAAA TCTCTTGAAA CTTCTTCTTC AATATTAGAT TCATATCAAT 300
 CATTTTtGTC ACCACACCAA TGCTTTTGAG TTTTAACAAT TTCTTTTACA ATAGATAAAA 360
 CAAATGTTTC TTGATCCTTA TCAATGCCAA ATATTCGATT GnAG 404

(2) INFORMATION FOR SEQ ID NO: 1059:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 233 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1059:

5 ATGTACATAG GⁿATGACATA AGTGTGCCTT CTTTTTCAAG ACCCTCCATA GAAATAATAC 60
 ATGGATGTGC ACCACGⁿTAC TACCTCTTTA ACGTTACCAG AATTGATAAA TTAACⁿTTTCT 120
 CTTGTGTTGC TAAACCTACA ACTGGTGTAC CTTCTTCGAT TAAGGCAATT GTACCATGTT 180
 10 TAAGTTCTCC ACCAGCAAAA CCTCGCTGAA TGTAGAAATT CTTAAGTTTA AGT 233

(2) INFORMATION FOR SEQ ID NO: 1060:

(i) SEQUENCE CHARACTERISTICS:

15 (A) LENGTH: 295 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1060:

20 GCACCACTAC TGTTAATAAC ACACCTAAAA AAGTCGAAAT ATAAGGGTTA ATCGCTGTTT 60
 25 TAAATGTATA TCCTAGTGCG ATTGCCATTA ATTATCCGAT AGCTTTTTTCT GCTGCTTCCA 120
 TAGTCATCTC ACCTAATGTT GGATGTGCAT GGATTGTTAA TGCGATATCT TCAGCATTCA 180
 TACCAGCTTC AATTGCTAAA CCTAATTCAG AGATAATATC TGATGCACCA GTACCAACTA 240
 30 CTTGAGCACC GATTAAAGTA TCATCTTCTT TAGTGTAATA AGTTTAACAA ATCCG 295

(2) INFORMATION FOR SEQ ID NO: 1061:

(i) SEQUENCE CHARACTERISTICS:

35 (A) LENGTH: 413 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1061:

40 CAATGCCTCT CGTGTTCAG CTTCTCCGG TGAAAAACCA ATATTTTCAA GTGCAATAAT 60
 45 TTGATCTAAG TCCTGCATGA TTAⁿTTTTTCT TAATACCATA AAAACACTTC CTTAGCCCTA 120
 TATATCAAAA GTAATACCTT CATCTTTATA TTCATTATTT TCAAACTACC TTCACTATAA 180
 AAAACGAGTC TTTTATTGA AAGCCATTGG CCTTAATCAA TTAGACAAGT TGTATKATAC 240
 50 GAATTAGTAA ATAATCATGA TTATAATTCA TTTTAAGCAT ACTCAAAAAG ACTGGTACAT 300
 GTATACCACT CTAATTCGAA AAAATATATT TAGTTAAAAC CATTTCAAAA ACGACTTCAC 360

(2) INFORMATION FOR SEQ ID NO: 1062:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1062:

AAGCTGCATA CTCTCCAAAC TTAGAACCAC CGAAGCGATT CACAAAATAT TTATTAGCTA 60
 AAAAGTCGGC ACATAAAATT AATATTGTGA GCAATGCCAT AGATACATAA AACACCCCATG 120
 ATAAATGCTG ATTATGAAAG CCAAATTGAT AGATTAAAAA GCCAACCCAT AATACTAAAA 180
 CAGAAGGAAT AATCGGCTTA ATCAACCCAA CAAATGCTAA CATGAAGGCA GCGATGATAA 240
 GTAGCCATAA AATAATTGTC ATGTTGATAT CACATCCTCT TTTGTATTTT TTGATTTTAA 300
 GTAAAGAATA TAAGTATCAT ACCTAACATG GTTGATGCTG CTGGATACCA AAAAATACAT 360
 TTTCCCAAAC CTTACCCAGT GGAATCCTAG GCACCACCTT 400

(2) INFORMATION FOR SEQ ID NO: 1063:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1063:

TGGATCAGAA GGAATCTGGA TGCCTATTGA TGACAAAGGA TACTTTAATT TTGACTTCAA 60
 AACGAAACGT TTCGATGATT TAGAGTTAAA GAAAAATGAT GAGATCTCAT TAACATTTGC 120
 ACCTGATGAC GAAGATGAGG CATTGAAGTC ATTAATTTTC AAAACTAAGG TAACGAGTTT 180
 AGAAGATATT GATAAAGCAG AAATAAATA TGACCATACT AAAGTGAAA AAGTAAAAGT 240
 ATTGAAAGAT GTTAAAGAAG ATTTACATGT AGATGAAATT TACGGAAGCT TATATCATAC 300
 AGAAAAAGGT AAAGGTATTC TTGATAAAGA AGGTACTAAA GTaATTaAG GTAAGACTAA 360
 ATTCGCAAAT GCAGTTGTGA AGGTAGACTC TGAAGTAGGT 400

(2) INFORMATION FOR SEQ ID NO: 1064:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 434 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1064:

5 GTGGTCGTGA AGCAACTGAT TTCAAAGAAG AAGATATCGA GCTTTTCAAA GACATTGCCG 60
 ACAAAGTAAA ACAAACAAAT AGTTATGATC TAGCGTTTGA TGAATTAGAA AAAGAAAAAG 120
 ACTTCCTGCA AGTCATTGTC AAAAACGATG ACAAAAACCTT ACCTACTAAT CAAAATGTCG 180
 10 CTCAACTAGT AGAAGATTTA CGCCTAGAAA TCCAGAAAAT GCGCGAAGAA CGTCACCTAC 240
 TTGGTCAAAT GATGAATCAA GTACATCAGC AACAACAAGA ATTAAAAGAA CTTCAAATC 300
 AACTTACATC TAAAATCGAT TCAAATAGCG AATCCTTAAA AGCCATCCAA ACATCACAAG 360
 15 AGGCTATCCA AGAAGCGCAA GCCTCTCAAG CAAAAGCATT AGCTGAATCC ACCAATAAAG 420
 TTGGAAAGAA TGCT 434

(2) INFORMATION FOR SEQ ID NO: 1065:

- 20 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 239 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 25 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1065:

30 TAAAACATAT GGCTTGATAT TGCAGAAGAA TTGAAGTTAT CGTACCAGAA ACGGTACATA 60
 ATCATGATTA TATGGAAACG AAAAAAATAA AAATGGGTCA TTTAATATAG GAGGATTTAA 120
 CATTGAATTT TGAAGGTAAn TAATTGGAAn AGATTTGAAG TTGCATCGTT ATTATCGTTT 180
 35 AATGATTTTA TCACTGGAAG ATTACTTGAA GGTGCAAAAG ATACnTTGAT TCGACATGA 239

(2) INFORMATION FOR SEQ ID NO: 1066:

- 40 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 202 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 45 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1066:

AAATATCTAT AGACCTTTAT TCGGAAATGG TTCGTCTCCA GAATGGAAGG ATGAAGTACC 60
 50 GAGTATTGAA AGGTAGAAGG TCTCCAAACT TTACCTGnAC GTGCACGAnA TCTAACTGAA 120
 GATGATTTAG CAATTGAATT GAAACAGCCA ATTGTCTGGTT GTAATAACTT AGGAGAGTTA 180

(2) INFORMATION FOR SEQ ID NO: 1067:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 749 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1067:

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CTACAATTCG ATCAACGCCG AAGTTAGATA CACCGATTGC TTTAATTTTA CCATTTTCTT      60
TTAACTCTTC TAATGCACGC CATGAGCCAT ATACGTCATT GTAAGGTTGG TGAATAAGCA      120
CTAGATCAAG ATAGTCCAAA TTTAATCGTT GTAATGATCG TTCGATTGAT TTGATAGTAT      180
CTTCATAGTT AACATTTTCA ATCCATACTT TAGTCGTAAT GAATAGTTCA CTTCTATCAA      240
TACCTGAAGC TTCAATACCT TGACCTACTT CAGTTTCATT TAAATAACTT TGTGCTGTAT      300
CAATATGTCT ATAACCCGCT TTAATTGCTT CTTAACCGC TTCTGCGTT TGTCTTGAG      360
GAATTTGAAA TACTCCGAAA CCTAATACTG GTATCTTTAC ATCTTTACTT ATTTCAATAT      420
GATTCATAAA ATGAACCTCC TTTATCTGT ATGTCCACTA TAAACCATGG AGCGAACTCT      480
ATAGCAAGCC ATAGGTTTAC TTTCTCTCCC AAAGACGTTT AACATTGTCA TCATAATTAT      540
CACTAGCATT GATTTTAGCA ATATGATTAT CATAATTATC AATTTTATAT TGTAGTAAAT      600
CTCTCGCATC ATGAATTGTC TTTAAGTTTT CATTTAATTC TTCGAGTTGC TTATTTAAAA      660
TTTGCTTTTG CTGTGCTTGA ATATTTTCAT TTTTAGGCAA nTGCGCTAAC CTGCAAAATT      720
CGATAAGCGA TTCAATACTG ACGCCTGCA      749

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(2) INFORMATION FOR SEQ ID NO: 1068:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 436 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1068:

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TCCTCGAGAT AGACAAGAAT GGTGGTACAA TGTTTTTTAT GACGATGGCA AATATnATAA      60
GAAnATAA11: AAGAATGACA TGTCAAAAAT TAGGCGTAAT TTTTAGATTT ATCTATATAT      120
TTATGCCACC GTCAAACTT TTATnAAAAG TAAAAAGACA ATATTTATAT TGAAGTTGTG      180
ACGTGAATTT CTAAAACACA ACCAACAATC CACAAGGAAA CTAGTAAATA AGTTTAAATA      240

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TACTGACTAA AAAGATTTTG AAAGTGATTA AGTATTTAAA ACACGCCAAT CTTAAACCGC 360
 TATTGACAAA TATGAAGCGG AACCACCGTT GThTTTCTTT ThCAGGTCCA ATTGAATAAA 420
 5 TGTGATGAA TAGAAT 436

(2) INFORMATION FOR SEQ ID NO: 1069:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 551 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1069:

TTCTCAAGTA ACAGGTATTA TTGTTACTGG TACAATCAAT AGAGAAAAAT ATGGCATTAA 60
 20 CTTTAACCAA GCACTTGAAA CTGGTGGCGT AATGCTAGGC AAAGATGTTA AATTCGAAGC 120
 ATCAGCTGAA TTCTCAATCT CAGAATAATC TCATTACACA ATCCTCATTG TTTTAATATA 180
 TATACGAAAT GCCAACTATA TCATCCCTAG GTATAGTTGG CATTTTTTCGT TTAACTCATG 240
 25 TGTAACAAGC ACTAACTGTT CACCCTAATT TTAGACGCCT TTCATTCAGG TAGGTCTTAT 300
 TGAAACTGAA AACTTTGaTG ACCTTTTGcA AaGCCATTAA CTGTATAAAG CATAGATCCT 360
 CCGCCCATTT CTATATCATT GGAACAAATG ATGAGTTGAT TTGTTCCAGG TATAAATTGC 420
 30 GGATGAGTAG AACGTAACAT ATGCCCTTCA TCTCGGCCTG GTATCAATAT TTGTCCTATT 480
 GGATAACCCC TTTTATTAAA AACTAACACT CGACCTTGGA CCATACATTG CTACGGATAA 540
 ATTATCGGCA C 551

(2) INFORMATION FOR SEQ ID NO: 1070:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1070:

TATnATGGTA ACGCATGAnC CTGTTGCAGC ACGCTATGCA AATCGAGTAG TGATGCTAnA 60
 AGATGGTCAA ATTTTCACTG AATTATACCA AGGGGATGAC GATAAACATA CCTTTTTCAA 120
 50 AGAAATAATA CGTGACAAA GTGTTTTAGG TGGCGTTAAT TATGACCTTT AACGAGATAA 180
 TATTTAAAAA TTTCCGTCAA AATTTATCAC ATTATGCCAT CTATCTTTTT TCGTTAATTA 240

CAGAGTCATA TCCAATTATA CnGGC

325

(2) INFORMATION FOR SEQ ID NO: 1071:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 771 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1071:

TAAATGCCGC AATTGGATAG CTTTAATATA ATTAATAGTC AAGGTATTnC CAACAAnAAT 60
 ATATTATCCA CCCGAAGGAA GCGGGGTATn TTTGTTACTG ACGTCCCACA AGAAGCACAn 120
 ATATTAGATA GTGCTTACTC TGAAATTAAA AAATTAAGAG ATTATGATGA AAAACTAATT 180
 ATCCCAGGAT TTTTGGCGT ATCTCATGAA GGATATATAG TTACATTTCC ACGTGGCGGA 240
 TCAGATATAA CTGGCGCCAT CATATCAAGT GGTGTTAGAG CCACAATTTA TGAAAATTTT 300
 ACCGATGTGT CTGGTATTTA TAAAGCTAAT CCAAATATCA TCAAAGATCC TGAATTAATC 360
 GAAGAAATCA CTTATCGAGA AATGCGTGAA TTATCTTATG CTGGTTTTAG TGTTTTCCAT 420
 GATGAAGCCT TACAACCACT TTATAAGAT CGCATCCCTG TGGTGATTAA AAATACGAAC 480
 CGCCCTCAAG ATAAGGGTAC ATTTATAGTG CATGATAGAG AAATAAATGC GAAAAATGTG 540
 ATTAGCGGTA TAAGTTGTGA TAAAGATTTT ACCGTTATTA ATATCAAAAA GTATTTAATG 600
 AATAGACAAG TCGGCTTTAC TAGAAAGATA TTAGGTGTCT TAGAGGATAA TAATATTTCA 660
 TTTGATCATA TGCCTTCAGG TATTGATACT ATCAGTATCG TTATGCGTTC AAAACAAATT 720
 CAAAATAAAG AAACAAAAGT ATTAAATGAA ATTCGTCAAA AATGTGATGT T 771

(2) INFORMATION FOR SEQ ID NO: 1072:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 237 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1072:

CGGTGGATCC GTTTGATCTT GAGTGAGGTG CCAATGAAAG TTATGAGCCA CGTTGTCGCG 60
 CGCACCATAT CGTAGCACCT AGTGATAATA ATAAGGAGGA ATTATAAGTG TTTGATCAAT 120
 TAGATATTGT AGAAGAAAGA TACGAACAGT TAAATGAACT GTTAATGACC CAGATGTTGn 180

(2) INFORMATION FOR SEQ ID NO: 1073:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 733 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1073:

CTTCTTGTTGA GGGCGTTACA TCACCGGATG GATGATTATG AACTGCGATG ATTGCATTGG 60
 CATTTTCTCT CACCGCAATA CTAAAAATTT CACGTGGATG TACAATCGAA CTATTTAATG 120
 TACCTTTAAA AACACAGGTT TCTTTAATCA CTACATTTT TGAATTAAAC AATAAAATGA 180
 CAAAATGTTT TTGTGTTAAA TCTTTCATTG TTGGAATCAT ATAATCAGCA ACATCACTTG 240
 GTTGC GTTAT TTKTATACGA TTATTTTCAG CTCTTCTCCC CATCCTTTCC CCTAACTCAA 300
 ATGCTGCTTT TAAAGTAATT GCTTTTTGTA ATCCAATCCC TTTAACTTTT ATCAAATCGT 360
 TAATTGAAGA TTTTTTCAAT TCATTGAGAT TcGAAGCAGA TTTAAGCAGT TCATTACTAA 420
 TGTCTATGCT CGAGAATCCT TTTCTTCCGG TGTTAATTAA TATAGCTAAT AATTCTGTAT 480
 TCGAAAGACT TTTTGCACCA TGGCTTAACA AACGTTCTCT TGGCATTCTT GAAGTTACCA 540
 TTTCTTTAAT TTTCAAAAAT ATACGCCTCC TAAAAATTGA TGGATATCAT TATAAAAAAG 600
 TGAATTGATA AAAAAGGA rA TAAATATAAA TGGAACAAGG GGTAATAGTT TAATCGGCTT 660
 AAATATCATG GTAATTAAAG CAACTAAACC AGCAATGACA AATGTAAATA AnATGACATA 720
 AATAGTGAAT TGG 733

(2) INFORMATION FOR SEQ ID NO: 1074:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 768 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1074:

ATGGTTATTT TTTATGCTCT AAATCGTATG TGTTTATAAG GTTCAATTTT TTGCCATTAT 60
 TAATTTTGCC GAGCAGTAAT GGGTTGTTAA AGTATCCATC AATTATGCTT AGCAATATTG 120
 AAAAAATTAA ATGAAAAAGC GGTTC AATTC TTGAAAAATA GTGTATATTT ACATTTTGGT 180
 AATAACTAAC TATAATTTAC ATAAGGAGGT TGTCATTTGG TAGTATTGTT ATCTTATAGT 240

TATTTACATA GAAGATCGAA ATGTGATTAT TGTAATTCGT CACTCAAawG GTATGAATTA 360
 ATGCCGATTA TTAGTTTTTTT ATTATTAAAA GGGCGATGTC GAAACTGTCTG AAAGCGTATT 420
 5 TCCCTAACAC ATTTCTTAGG GGAAACCTTT GCTTTAATAC CTATCGTCTT TATTAAGTAT 480
 GATTTACACAT ACGTAAATGt ACGCTATTTA TAACTACATA TGTTtTTCTG CTTATTTTTTA 540
 CTATGACCGA TATCACTTCT TTAATGTTAG ATTGTCGCTT AATTATAATT TATTGTATCG 600
 10 TTTCTCTCTC GTTAAGTATG ATTTATCCAG TAGCTTTTAT CATTATTAGT ATGACCACGC 660
 ATATATTCTA CTTTTTATTT CGGGCATATA TTGGTTATGG TGACGTTTTA CTAATATCTG 720
 CACTTTCTTT GTTTTTCCCC TCTCCAATTC ACTATTTATG TCATTTTA 768
 15

(2) INFORMATION FOR SEQ ID NO: 1075:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1075:

TCATATTCAT TTAAAATACC ATTCATCTCA GCTTTTCTCA TTTTCTCTTT ATAAAGTTGT 60
 ATTTCTGTGC TTAATTCTGG CTCAGACATC TCACTCAATT TCTTCTGTTC CATCGGCAAT 120
 30 ACCACTTTCT TCTAATTTAG CTTTAATTTT ATCATATTTA TATCCTTTTC TCATAAGGCC 180
 TTCGATAGTT TTTGAAATTA ATTTCTGTTG CGTGTACTTC TTTGATTTT TATTATAAAT 240
 TTTTCTAAA TCTCGTTGTA ATAAATCGTC TAAAACCGCT TCATCTTGTTG TAAAATCCAT 300
 35 TTCAATCAAT ACAGCATGAA TGGTTTCCAT TTCAAACCCT TTTTGAATTA AAGATTGCAT 360
 TACTTTTGCh TnAACTnTAT TTTGTGGCCC nTTTTTTGTT 400

(2) INFORMATION FOR SEQ ID NO: 1076:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 753 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1076:

TTAGGTCAAA ATATGTTTTA TCCAAAAGGC ATTTTATCTC AATCTGCTGA AGCAAAGAGT 60
 ACAACATATA ATGCAACTAT AGGTATGGCG ACAAACAAAG ACGGAAAAAT GTTTGCATCA 120

CAAGGCATCG AAGAATTACG TGATTTATGG CAACAAAAAA TGTTCGCTGA CAATCCAGAG 240
 CTATCAATCG ACAACATGTC ACTACCAATT GTTACGAATG CATTAAACACA TGGTTTATCT 300
 5 TTAGTTGGCG ATTTATTTGT AAATCAAGGT GACACTATCT TGTACCAGA GCATAATTGG 360
 GGTAATTACA AACTTGTMTT CAATACGAGA AATGGTGCAA ACCTTCAAAC ATATCCTATC 420
 TTTGATAAAG ACGGGCATT TACTACTGAT TCACTTGTAG AAGCTTTACA ATCATACAAT 480
 10 AAAGATAAAG TCATTATGAT TTTAAATTAT CCTAATAaTC CGACAGGTTA CACACCTACG 540
 CATAAAGAAG TGACTIONCAT CGTCGATGCA ATTAAAGCAT TAGCTGATAA AGGTACAAAA 600
 15 GTTATAGCTG TTGTGGATGA CGCATACTAT GGTTTATTCT ATGAAGATGT GTATACTCAA 660
 TCATTATTTA CTGCATTATC TAATTTAAAT TCAAATGCAA TATTACCTGT TCGTTTAGAT 720
 GGTGCAACAA AAGAATTTTT CGCATGGGGA TTC 753

(2) INFORMATION FOR SEQ ID NO: 1077:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 405 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1077:

AGAAGCGATT TGACaATAAA ACAATTGAAA AACTTTTGG AAGCAAGTGG TGGGAGAAAA 60
 CGCCTGACAA ACTAAAAGGA TTTTCGGTTG AATATTTAAA TAAAAAGGAT ACTTAATGAT 120
 35 ATGAGAATTT TAAATATTGT ATCGAGTAAT ATTGTTCAAG ACCCAAGGGT ACTTAAACAA 180
 ATAGAAACAA TTAAAGGCGT TACGGATGAT TATAAAATTG TTGGAATGAA TAATTCACAA 240
 rCTACTAATA AGCGATTGGA AAATTTAGAT TGTAATTATC GTTTGTTAGG TAGCAAGGTA 300
 40 GATCCAAAAA ATATTCTTTC TAAATTAATT AAGCGTATAA GATTTGCaAC AGGTGtTATC 360
 CGAGAAATTA AAGCTTATAA AcCTGACGTG AtTCATGCaA ATGAT 405

(2) INFORMATION FOR SEQ ID NO: 1078:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 504 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1078:

CATATTCACA CCTCAATATT CCATAACTTT TACTTTAATA TCAATCCACT TAAATCCATT 120
 CACATCATTG AGTATAAAAT AATATGGTGA TATACGTTGA AGTTGATTAT CTTATATATA 180
 5 AGTATACTTC ACAGAATTTA TAAAATTGTT TAGTCATCAT CTTCAAGTGT TAAATCAAAA 240
 ATATAGAATC TACTGTATTG CATmATAaAT TGAAATGCCA CAAATTGTGC TCCAGCGATA 300
 ACCAACATGC TCACAATAAT TATAAACTTA GATTCTACGA CATTAGGmAC CatATATATT 360
 10 CGATAATTTT TTCAATATAT ATAAATGAGC TCAACGCAGT TAATAATAAA CCGAAATGTG 420
 TTTTAGTTTT ACCACCCCAA CGTTTTGTTA CTTTAGGTAA TTTTAATAAC GTGAACATTC 480
 CGCCAATTAC TAATAACAAA TAAC 504
 15

(2) INFORMATION FOR SEQ ID NO: 1079:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 645 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1079:

CATTCTTAAT CAACTTCTTC ATAATGGGAA TTTGGCATGG TAnCGAAGTG TATTACATTG 60
 TTTATGGTTT ATACCATGCA GCATTGTTTA TAGGTTATGG CTATTATGAA CGTTGGCGTA 120
 30 AGAmACATCC GCCACGTTGG CAAAATGGTT TCACAACAGC ACTTAGCATT GTGATTACAT 180
 TCCACTTTGT AACATTGTC TTTTAATCT TCTCAGGTAA ACTTATATAA TAAAGGAGAA 240
 TTTAATTATG GAATTTAGAG AACAAATATT AAATTTATTA GCAGAAGTAG CAGAAAATGA 300
 35 TATTGTAAAA GAAAATCCAG ACGTAGAAAT TTTTGAAGAA GGTATTATTG ATTCTTTCCa 360
 AACAGTTGGA TTATTATTAG AGATTCAAAA TAACTTGaT ATCGAAGTAT CTATTATGGa 420
 CTTTGaTAGA GATGAGTGGG caACACCAAA TAAAATCGTT GAAGCATTAG AAGAGTTACG 480
 ATGAAATTAA AACCTTTTTT ACCCATTTTA ATTAGTGGAG CGGTATTCAT TGTCTTTCTA 540
 TTATTACCTG CTAGTTGGTT TACAGGATTA GTAAATGAAA AGACTGTAGA AGATAATAGA 600
 45 ACTTCATTGA CAGATCAAGT ACTAAAAGGC AACTCATTC AAGAT 645

(2) INFORMATION FOR SEQ ID NO: 1080:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 267 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1080:

5 AGATGCCAAA ATCAAAACCA ATAATTTGGC AACACATAT AAGTCCACTT TACCGGACCT 60
 nTAAACTTAT CGTACTGTTA AGAACCAAAC GACTGCCATT ATTTGGTCCT AAAGCCACGA 120
 TGGTGGTAGC CnTTGTAATA ATGCTGGCGT AGAAATTAAC CGCCACCCCT AACACCGAAC 180
 10 TATAACGCGG ATAAACCAAT AAAATTATGA TATAATCATC CGTTAAGTCA ATCCATAGTT 240
 TAACATCCCT TATGTTTAAT TTA CTCT 267

(2) INFORMATION FOR SEQ ID NO: 1081:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 441 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1081:

25 ATATTTGTCC ACTATTAGAA GATTGTAGAG AAGGACAAAA ACGTTATAAA GCTAGTTTGA 60
 AAGAAGCGTG ATAACATGAC AAATATTACA AAAGAGGTAT TTGATAATTT AGAACAAGAG 120
 ATTGATTTAT TTGCCAAAAA TAAGACATTA GGTTCTAGTG AAGCAAAGCC CTACTTGGAT 180
 30 GAATACCATA GTAAAATTAT TGATTATTTT AAGCAGGTTA ATGACATAAC TGGCAATATT 240
 GATTTTGATA AATTAAATCA ATATCCTGTT GTGCCAATGA ATTTTAAAGA AAGATATGAT 300
 TATATGATTG AACGTAAATA TCATTTTATG GGCTATCGAC AAATGAAGAC CTTTAAAACT 360
 35 GAATTGATTA AAATGnATGC TAGTTATCAA ACAAGGTTAA AGAATAAGCA GGTATnGACA 420
 AGATTGATCA TTTCTAGTG T 441

(2) INFORMATION FOR SEQ ID NO: 1082:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 410 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1082:

50 AAAATTCTT AGtTGATGGT TATTGTTGTT GATTTGAATA ATTTGTAGCG AATATTTTGT 60
 AACAGGGCTA CTAAGAATTT TTATAACAAG AAGTGATTTT AATCGTACTA ATTTTCAGCG 120
 TTTGATGACA AAAGTGATG TCCAACTTA AATAATGGCG ATAAAATTTA AGTCATGGGT 180

GTTGAATATC AATAAAAGAT TAGCAAGTTA GTTCAAAATG GCTATGTATT GTTTTTTGAA 300
 ATACATAGGT TTGAAATCTA TATTAATTAT GCACCAAATA ATTTAATTAG ACTCTATCGA 360
 5 AAATTTCCAA ATTTTGCTTA CTATCTTTCT AATTTTACTT TTATATTGTG 410

(2) INFORMATION FOR SEQ ID NO: 1083:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 586 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1083:

CAGATATTCC CTTCTATTTA CAAGTTGGTA ACCCATATTT ATCAGACAGC GTAGATAATC 60
 20 ATACCGAAAA GTTGTTAGAA CGCTACGAGC AGTTGGTGGG TTTAGTTATG yAAAGTAATG 120
 ATATGAATCA CGTTTATGTG TTACCACAAC TTCATACATT ACTTTGGAGC AATAAAAAAG 180
 GTGTATAAAG GATAACTTAT TTTACTTTTT GCAAGTCATA TCTAATGAAT AACAATATAT 240
 25 TAATTGATAT AATAGTTGAT TGAAGTATAA CGAACAGGAG TCCATCATGA TTGTATATAT 300
 ATTAATTAAT ATTGCTATCG TCGTACTTAT AACTGGATTC AATTTATATA GGCATCAAAT 360
 GCAACATTTA TCATTAAGTG CAATGTTGtT ATCTATTACG ATaACGCCT TTATAAATAC 420
 30 ATTCATAATT GATAAATATA ACTTTATTAC TCTGTGTACT ATAACGATGT TTATCATTTG 480
 GACGATACTA CAGTTTTACA TTGATAAAAA ATTAAACCT GTATACATTA CAGACCAAAA 540
 ATTTATTGCT ATCATATTAA CGATTGTTGT CAGTTTAACG CAACGT 586
 35

(2) INFORMATION FOR SEQ ID NO: 1084:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 638 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1084:

AACACAAGGT AGCGTCATTA GCATTTAGAT TTTATTGCCA AATTATATAA CGATTTATAC 60
 ATCAATAAGA AAACAATAGA TGATGTATCT GCAGTTTCTG AAGTGAAATA TGATATTAAA 120
 50 TCACAAATGA GTGATGATGA GATTAAGCGT TTAGAGGAAC AAGGACTTCA AGCTATTAAA 180
 GAAGGACAAT TTGCAGTACT TTTGATGGCA GGTGGTCAAG GAACAAGACT TGGTTACAAG 240

TTAAAAACAT TGAATCATCA ATCTGGACAT ACGATTCAAT GGTATATTAT GACAAGTGAT 360
 ATCAATCATG AAGAAACTTT AGCTTATTTT GAAGCACATA GTTATTTTGG ATATGATCAA 420
 5 GAAGCAATCC ATTTCTTTAA ACAAGATAAT ATTGTGGCGC TTAGTGAAGA AGGGAAGTTA 480
 ATTTTAAATC AACAGGGTCG TATTATGGAA ACGCCGAATG GTAATGGTGG CGTGTTTAAA 540
 TCTTTAGACA AGGCAGGATA CTTAGAAGAA ATGTCTAATA ATGGCGTTAA GTCATATTTT 600
 10 CTTGAATAAT CATCGACAAT GTTTTCAGTA ACATGTTG 638

(2) INFORMATION FOR SEQ ID NO: 1085:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 618 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1085:

ATTGCAATAT TATCCGCTTG GTTCAACACG TCATCTTTaT tAaTACcATT TATTGgAAaT 60
 25 tCCACCCcATT TCCcGGgCTt CTtACTTCCc TTTATAAAAC TGcCCATTTA ATGAATACTG 120
 TTTAGCTTCA TCTATTGTA CTTCCACTAG TTTACCAATC ATTTCTTTAG GCGCTTTGAA 180
 ATTAAGTAGC TTATTTTTAT CAGTGTAGCC AGCAAGAACC TGATCATCTT TTTTACTACT 240
 30 TCCTTCACAA AGTACTGTTA CAGTTTGTCC TTCGTACTTA CTcATAGCTA TTTGTGAATA 300
 ATGACCAACT TTTTATTCA AACGTTGCAA TCGTTCCTTT TTGACATTTA AAGGTACATT 360
 ATCTTTCATT TTAGCAGCAG GCGTACCATC ACGTTGTGAA TACAAGTACG TATATGCATG 420
 35 TTCAAAACCA ACTTCATCAT ACAGAGTTAA AGTTTCTTCA AATTGTTCTT CTGATTCACT 480
 TGGATACCTT ACAATAATAT CTGTAGTTAA TGCTACATTA GGAATTCTAT CTTTGATTCTG 540
 TTTTACTAAA TCCAAATAAC TTTCTCGTGT ATATTTTCTA CCCATTATnT TTAATACTGC 600
 40 ATTATTTCCA GATTGAAC 618

(2) INFORMATION FOR SEQ ID NO: 1086:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 502 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1086:

CAGCAATATC ATGATCAGTT TAATTCATCA AGAAAGTCTA TCTATACTTT TACAGAAACA 120
 GTTCAACCAA ATCGTGTTAT TTATGATTTT TATGATTATG ATCCGTATCA ATTAGCAGCA 180
 5 AATAATGCGA AAGCATTAAA GGATCATATT GAACAAAAC TTAACTTTAA AGTCCAAAGT 240
 ACCGGTGTTA KTTACTTTAG TGATGGTACA GTTAATATCA TTCAAGGTTC TGAAGAAAGA 300
 GATAAATATG TTGATACAGT TTCAACAAAA TCTTCGTTAC GACGTATTAT TAGCGAACCA 360
 10 nAGAGCTATC TAAACACCCT TTAAATAAAG AACAGGTTGA nCAAATCACA GCTATATTCA 420
 AGTAAATCA AAGGCATAAT AATCCATTAC GCTCGATACG CACTATGGTT ATTATGCCTT 480
 TAAATTATTT CTATATATAA nT 502

15 (2) INFORMATION FOR SEQ ID NO: 1087:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 429 base pairs
 (B) TYPE: nucleic acid
 20 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1087:

TTGCCTGATG GACGATGGCC ATCACAGACT GAGTTTAGAT TGTCTTTAAT GCAACAACTT 60
 GCTGTAAACC AAATTACGAG TGGAATGAA AGAATAAGTT CAGTTAATGG GCCACCAGGT 120
 30 ACAGGTAAGA CTACTTTATT AAAAGATATA TTTGCTCATC TAGTAGTTGA mAGAGGTAAA 180
 GAGTTAGCTA AACTAAATAA TCCTAAAGAT GCATTTGTCA ArACAAAAAT TCATGAAACG 240
 GATGATAAAT ACGTATACTT ACTAAAGGAn nTATTGCCAA ATATAAGATG GTAGTCGCAT 300
 35 CTAGTAATAA TGGAGCTGTT GAAAATATAT CTAAAGATTT ACCGAAAATT GAAGAAATTA 360
 TAAGAnATCC CGAAAAATGT AAATTCCCTA AATATGAACA GAATTATGCA AATTTAGCAC 420
 ATGAATTAA 429

40 (2) INFORMATION FOR SEQ ID NO: 1088:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 611 base pairs
 (B) TYPE: nucleic acid
 45 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1088:

TAAGACCTAA TATTTTGGnC CAATACTATG GTGCAGGTnA TTTATATATG ACACCAACAG 60

ATCCATTATT ACATGAGTTT GGTACGAAAA AGTATCCAGA TGAATATCGA TATGGTTTCT 180
 ATGCTAAGCC AACATTGAAT AGACTTAACG GGGGATTCTT TGGACAAGTC TTTACTGTTT 240
 5 ACTATAATGA TAAGTATGTA GTTGTA CTG CATTAAATGT AAAAGGAAAC AATGAAGTTC 300
 GAATCAAACA TATTTATAAT GATATTTTAA AACAAAATAA ACCTTACAAT ACGAAGGGTG 360
 TTATTGTTCA ATAATTAATA TAGAAGATAT AACATGTATA TGGCATTAG GCATCGACCT 420
 10 TATCTGACCA GTATACGAGT TATATCTTCT TTTTATAGT GGTAAGAGT TTAAAGTATA 480
 AGGTTGAAGA AGGATGAGT TAAAAATATG TGTAACTGA TAAAGGGGA nATCATTG 540
 15 TGAGTTGGCA TCAGnCTAAA nTGAATGAAG ACGAATACGT TGGTCCATGC GTGGTGTGAn 600
 TGTTTTCTAA A 611

(2) INFORMATION FOR SEQ ID NO: 1089:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 644 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1089:

CTGGATAATC GCTTTAATAT GATCAATTTG CTPTTCACTC ATATTAAGCT TATCTAGCCC 60
 30 TTTCAATTTTA TTCATACCTG GAATCATTTT CATAATATCA TCCAGTGGTC CTAGATTTTT 120
 CACCyGwTCA AGTTGTTCTA AAAAATCATC TAAAGTAAAC GATGACTCAC GCATCTTTTT 180
 35 CTCTAAATCT TTTGCTTTTT CTGATCCAC ATCTTGTGTC GCTTTTTCAA TTAACTTAA 240
 CACATCACCC ATACCTAAAA TACGTGATGC CATACGTTCA GGATGGAATA GCTCTAAACC 300
 ATCTAACTTT TCACTCATAC CAACAAATTT AATTGGTTTT TGTGTCACCG AACGAATAGA 360
 40 TAAAGCTGcA CCACCACGTG tATCACCATC TAATTTAGTT AAGGtAACAC CTGTGACATC 420
 AAGTTGATCG TCAAAAGATT CTGCAACATT GACAGCATCT TGACCCGTCA TTGAATCGAC 480
 AACTAACATA ATTTGTTTTG GTTTAGCAAT GTCTTTTACT TCTTTTAATT CGTTCATCAA 540
 45 TGCTTCATCG ATGTGTAATC GACCTGCTGG TATCAATGGA TTACAAAGTC TAAATGTTCT 600
 TCTTTAGCAn GTTTTAATGC ATTAGTTACA ATTTGGTGTG GGCC 644

(2) INFORMATION FOR SEQ ID NO: 1090:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 207 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1090:

5 GATCCTATCG TTTTAGTGCA TGGTTTCAAT GGGTTTACAG ATGATATTAA TCCTTCAGTG 60
 TTAATCATT ATTAGGGCGG TAATAAAATG AACATTGCGC AAGATTTAGA AAAAATGGTT 120
 ACAAAGCTAT GAAGCAAGTA TAAGTGCTTT TGGAAGTAAC TATGACCGCG CATTGAACTT 180
 10 TATTATTATA TCAAAGGCnG TCGnGTA 207

(2) INFORMATION FOR SEQ ID NO: 1091:

(i) SEQUENCE CHARACTERISTICS:

- 15 (A) LENGTH: 212 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1091:

20 GACTCTAGAG GATCCCCGCT CAAATGCCAT TTGGTGATAT TCGTGAAGCT GCTGGCGAAA 60
 AAACATTTAA TCCAGTGGA GATCGTTTCG TAATAAAAAA ATAATCAATA TATTGTTAGG 120
 25 AATGGGACAG AAATGATAAA GATTCATTAG TTATTCATTA TGTTGTAGTT CTTACACATT 180
 AGCCGCTGCT AATnGCAACT TAAGAnTAGG TT 212

(2) INFORMATION FOR SEQ ID NO: 1092:

(i) SEQUENCE CHARACTERISTICS:

- 30 (A) LENGTH: 208 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 35 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1092:

40 TGGACCTGCA ATTGGTTGCC AGCAGCAACT TTAGCTTCAT AGCTAGCTTT GTGAGCAAGT 60
 GGTAACCTG GAACGATATC ACCAATTGCA TAGATATTGC TGATAGACGT ACGGCTTTGT 120
 TTATCAACnn CTAATAATCC ACGTCAGCGA ATTTAACACC TAATTCTTCT AGGCCTAATT 180
 45 CGTCGTGTTT GGACGACGAC CTACATTA 208

(2) INFORMATION FOR SEQ ID NO: 1093:

(i) SEQUENCE CHARACTERISTICS:

- 50 (A) LENGTH: 902 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
- 55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1093:

5 CTTAAAAGTT GTnTCAATAA TGATTGTATT AGTTGCATGC TTATTATATA TGAATCATAG 60
 TATTGATTTA CCTACCCTTA TTATGATTTT AATTTTTTCA TTTGTGATAT TTGATAGTGT 120
 TGAAAATATT AATAGTGCTG CACACGTACT TGAAATGATA GATATGACGA TAGATGATAT 180
 10 TGmAAAGATA AAAAATGCTC CAGAACTGGA TGAGAATGGA AAAAATTTGA CGATTAAAAA 240
 TGAAAATATC GCTTTTCAAA ACGTGAACCTT TTCATATGAT GATAACAAG TGATAAAGAA 300
 TGTGAATTTT GAGATACCTA CACAAACATC AACAGCAATA ATTGGACCTT CAGGAAGTGG 360
 15 GAAATCTACA TTATGTCACT TACTCTTGCG CTTTTATGAT ATCGATGATG GAAATATTCG 420
 CATCGATGGT GTTGATATTA AAGATATGAC ATTAAGTACG TTAATGTCGA AAATTAGTGC 480
 AGTATTTCAA AAGGTGTATT TATTTAATGA TACGATTGAA AATAACATAT TGTTTGGCAA 540
 20 TCCAGGTGCA ACGAAAGAAG AAATTATTCG TGCCGCGAAG CAAGCATGTT GCCACGACTT 600
 CATCATGTCA TTACCTGAGG GATATCAAAC AATGCTAAAT GAAAAAGGTA GTAATTTATC 660
 TGGCGGAGAA AAGCAAAGGA TTTCTATTGC TAGGGCGATA TTAAAAGATG CACCAATAAT 720
 25 TATTTTAGAT GAAGCAACTG cAAGTATTGA CCCTGAAAAT GAACAGCTGA TTCAAACGGC 780
 AATTAATGAA TTAAGTAAAG GCAAAACAGT AATTACAATT GCACATAAAC TTGAAACTAT 840
 30 TAAAnATGCA GATCAGATTA TAGTGCTCAA TGnAGGTGAA ATAATTCAAA AAGGTAGTCC 900
 TG 902

(2) INFORMATION FOR SEQ ID NO: 1094:

35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 632 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1094:

45 ACGCAAGGGA TATGATTAAA CACCATAATA TACAATCACC TTTTTTATAC ATGAAAGCAC 60
 TAATAGAATC GATTCATTTA AACATAAAAC ATGATTTTAA CCAGCAAGAT TTGATTGAAA 120
 TACCAATTGT GTATGGTTCG AAATATGGTC CGGATTTAGA ATCACTTTTA AAACATTACA 180
 50 AAATCAAGCT AGAAACTTTT ATTGAATTAC ATTCTAAGGC GCAATATTTT GTTTCGATGA 240
 TGGGATATTC ACCTGGGTTt CCTTATTTAA CTGGATTAAA TAAGAAATTG TATATTAATC 300

55

GCGGTATTGT AACTACGGAT ACAATTAATG ATTGGTTAGT TATTGGTTAT ACACCATTAT 420
 CACTTTTTTAA TCCGAAAGAA TCAGATTTTCG CACGCTTAAA GTTAGGCGAT AATATTAAAT 480
 5 TTAGACCTAT CAATGAAAAT GAATTAGAAG TAGGAGCGTT TAAAGATGTC AATCATAATT 540
 GAAAAAAGTG GCTTATTTCAG TAGCTTTTCAG aCTTTGGCAG AAGGGGATAT GAACATGATG 600
 GTGTAATTCC ATGTGGTGCA CTTGATACTT TA 632

(2) INFORMATION FOR SEQ ID NO: 1095:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 212 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1095:

GCAACACGAT TGCTAAAAAA TGATATACTT ATTAATTGTT GCAACACTTG TTTATGTGAT 60
 ATACTGATCA TGGCATTGTG GCGGATTGAT GACCATACAC ATGACGTGAC AATGATAAAT 120
 25 CATTGCCACT ACTTGTTAAA ACAGCAATTT CTCAAGTGGA AGCTGGTGcN ATATATTnCG 180
 CCAATAATAT GATGGATGGT TTGTTGCTGA AA 212

(2) INFORMATION FOR SEQ ID NO: 1096:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 466 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1096:

AATGAACTGG GTATTnCTTT TGCCATGCTT GCCCACTGCC ATGCATTTGC TGAAGAATGT 60
 TTTTGTAGAA CCGgCTTAAG AATTTGAAGT TTGTAGTAGT ATCTAAAAAG ATTACTTGGT 120
 GATACTCAGG ATGAATTCCT TGTTcATTAT TTTCAGCTCC TTTGCCCTGA ACCATCTGGA 180
 45 ACAGAGTTAT TTGTGAGTTT TTACCCAATA CTGTGTAATT ATAAAGGTAA TTAATTCAAA 240
 ACGCAAGCCC CTATATAATG TTTATTAAAT TATAGGTCGA CCCGTTTTAG TACTTTCTTC 300
 TGCAGACTTT TGTAGCTGCT TGAAGAAATC TtCATTATTC TTAGACCTTT TAAGTTTGCG 360
 50 AATAAATCTT TCAGTAAAGT CAGTTGAGTC AGTGAATAGA TTTCTTAATT GCCATAATGT 420
 GTCTAATTCA GATTTACTTA TCAACAATnC TnCTTTACGC GTTGAA 466

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 208 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1097:

TTTTGATTCA ATAGGCGGTT CCGTGTATC ACTGACAACT TTAGTTGTAG CTTCATCTTT 60
 ATGTATTTCT TCGTTAAATC CTTCAAGTTT TTAGTCGTGG GATTTTAACC TCAGGATGTT 120
 CCATCATGTC TTGACTATCA AGTCCTTnTA CACGTGTCTT TATGTGATGC TTGATTGCGT 180
 nCCCTTACTT TTTGAATAGG GGTAGTAA 208

(2) INFORMATION FOR SEQ ID NO: 1098:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 571 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1098:

CCTTCAACGA AAATAGCATA TTGACCATAA ATATTATGAA TTGTTTGTTT AACATCTTCA 60
 GTTATTGGAT CTTGACTCAA AAATACATTA AATACTTCAA TACCAAATTT ACGTGACATT 120
 TCTACAGCTT CATACGTATC AATAATACCA TCTTGACTAT AATTAAATGC AGACGGTTTCG 180
 CCGTCTGAAA ATAnGATTAA AAATCGTTGA TGTTGATTTT GACGCATTAA TCGTTCACTT 240
 GCAACTCTAA TAGCAACACC ATCACGATTA TCATCTTGAG GTTCAAGTGC CATAATACGT 300
 GGGCCATCTT TTTCAAAGGT TGAGTAATCA TAGTTAATAA TTTCAATTAAT GATATTTGGT 360
 TGTGCATGCT CGTCTGAATC AAAGGCATCC TCACTGAATG ATAAAATTTT ATGTTTAATG 420
 TTCAATGCTT TTAACGTCTC GTGAATAAAC ACTACACCTT TCTTCGTTTC AGCCATTTTA 480
 TCATGCATAC TTGCTGgACG CATCAATTAA CAATGTAAAT GTnCGCATCA AATGATThAC 540
 TTAAATCTTG TTTTTTGTA AACAATTTAT A 571

(2) INFORMATION FOR SEQ ID NO: 1099:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 214 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1099:

TGCAAGTGAA CAAGTCATTA ACTTGTTTAA TACACGTGGG GCACAAGTCG AAGAAGTTTG 60
 5 GGTGAAGGGC CATGAAATTA CAGAACTGG ATTAACGGCT GGTCAACAAA TACTTGGGAA 120
 ATAACAGTTC TATTAAGAAG CGGACAGATG GAAAAGATTT TACCTTTCAT CTGCCGCTTT 180
 10 TTGATTTGAA GGCCGGACCh AATTTACCAh GGAA 214

(2) INFORMATION FOR SEQ ID NO: 1100:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1158 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1100:

CACCGTATTG TACAAAGAAT TTAAAGTTTT CGATTTCTTn TCTTAATTTA TCATCAGCTA 60
 TCGGTTTGGT TGGGATAATT TTATTATGTT CCATTTTAC TGGATATTCT TTTTCTTTAC 120
 25 TACGTGAGTA TCCTnTTTTA TCTTCCCATATA ATCCCTCAC AATAAATTCA CCTTTTGTCTG 180
 TTCTGGTATT GCGGTCTACA TACAGGACCA ATCCTCTGGA TTCCaTATTc TTTCCATTTG 240
 TTTCTATTGT CATTTTAGAG TGAATTATCC aAGTGCCTTT GTCGCCCTTT TCAAACCTTT 300
 30 GATCTCGAAA GCCTTCCTTA TCATAAAAGT CTTCAAGATT TTTAGTTGGA TACAGGCTCA 360
 ACGTTTTGTT GAAGTTTTCT TTAATTTGTT TATCTTTACT GCTTTCTTCC TTTTTCATTC 420
 35 CGCAAGCCCC TATAAAAACA GCTAATAATA CTAAATACAG CCAGAGCCTC AACCTTTTTG 480
 AGTGAATCAT CATTTACAT CCCCATTTTT ATTTTTGATG CAAAGTTAAG TtCAAATTCC 540
 AATATTAATA ATATTAGAGG aAAtTTtATG ATTAAaTCCT CGTGGATTtT AATTGTTAGT 600
 40 TGTATTTTTT ACATATCAAC ATCACAAATT ATTTAAAAAG CGCAAATATC TTTATAATTT 660
 TTATTGGCCT AACCAACTAA TTAATTAAGA TAAATTGCGC TTATATTTAA AATAATAACA 720
 CTGAAACTCA ATGTATTTAC TTATTAAAAT TGATGTTTAA ATACAACTTT ACTAACATTC 780
 45 ATTTTTCGGT TTACATTAAT TkGTTAGATA ACGATATATA TCAtCTCTTA CAGCTTTATC 840
 CAGTGCTAAA TCCATCGTTA CTACGTTTGA ACCATTGGC ATTTTATCTT GCTTTTCTGA 900
 ACCTTCTATA TATCCAGCAG TTCCTAAATA ATAAAAATAT ATACCATCAT CATCTTTTTT 960
 50 CTGTACAAAA ATATACATTT TAATTCCTTT TGCTCTATGG GACAAAATTT TCTGAACTTC 1020
 TTTTGATTCT AGCGTTCTAT TAGATTTAGT AAACCATTTT AATTCATCTT GACTTAAAAA 1080

TGGCATTCT TGGCTTTT

1158

(2) INFORMATION FOR SEQ ID NO: 1101:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 353 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1101:

CCAAATGCTA TAAATGCAAA AATnGCTAAT GCGATATTTT TATAGAAAAT ATCTGGTCCT 60
 AAATTTTGTA AATACGTGGT AACGTTGCG TATGACAATA AGCCAATCAC TACAGCGTAA 120
 ATATGTGAAA TAATTAAACC GAACCGTCTC GCTCTTTCAA AAACAAGTGT TGCTAAAATA 180
 ATAATCAGTA ATCCAAATGA CAAGGGTTGT CGCCAACTTA ATGGTAAAAA CTGACCTAGA 240
 TAGCATCCTA TGCCAAATAT AATCCAATAA TACATAAAAT AAAGCCACAC TTTACTTAtT 300
 GATTGAGCAT GCTGGTTTTG ATGATAATAT GAATGATTTG TATTTTGC GA CAA 353

(2) INFORMATION FOR SEQ ID NO: 1102:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 194 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1102:

CCCACACGTC TTCCACCGGA TAGGTTTCGA GCTCGGGCGA ACCGGGCAGG GCGGTGACCA 60
 CCCC GTGCGG TGTCTTCTTG GCCAGCTTGT TTGCGAGCTT GGCCAGCGTC TTCGTGGGGC 120
 CAATGCCAC GCAACACGGG ATGCCACCC ATTGGAGGAT CTGGGCACGG ACCTGGCGGG 180
 CCATCGCTTC GntG 194

(2) INFORMATION FOR SEQ ID NO: 1103:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 220 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1103:

TCGCTTTTGC TTTTGCATCA GGTATTGCTG CTATTTTCAGC ATACTTTTTG ACTTTCAAAT 120
 CTGGTGATCA TGTCATCTTA CCCGATGGAT GTATATGGGC GGTTACTTTT CGTCTCACTG 180
 5 TGGCAAATTT TGGATCGATT TAATATTGAA TTTTACAACC 220

(2) INFORMATION FOR SEQ ID NO: 1104:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 235 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1104:

GGACATTGTA TCGACATTTT AAAGATAAAA GCGATTTATG CTACTACGTC ATACAAAGAG 60
 20 ACCTTGATAT TTTTATCACT CATTTTAAGC AAATTAAAGA TGACTATCAT TCTAATTATG 120
 AGGTTATGCA AGTGTGCTCA TCGCTTTTAA ATAAGTCATA ATAAAAATCA AATAATTCTT 180
 GATAAAATGC GCTTTGGTAA AAACGTAATT TATTGTTGCC TGCTTCAATA CATTG 235

(2) INFORMATION FOR SEQ ID NO: 1105:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 229 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1105:

GCGGGGGCAG GTAAATCCAC TTTGACACAT CTTATTGCAG GTGTTTATCA GCCAACAATA 60
 GGTACTATAA GTACAAACCA GCGTGATTTT AATATTGGGA TACTTAGTCC AnAGCCCTAT 120
 40 ATTTCAGGCT CTATAAAGA GGATATTACG ATGTTTAAAG nTATAGAAAA TAATACTAAT 180
 GAAGAAGTGC TAGACGAAGT AGGGTTTATT AGACCAAGTG CCATCCTTC 229

(2) INFORMATION FOR SEQ ID NO: 1106:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 596 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1106:

	rAATTAAAAT CAAAATTTGA TGAAGTAAAT GTAATCGCGT CAACAAACGG TAGAAAGTTT	120
	ATTAATGGTG AAATATTAAA GCAATTTTGC GATAACTATT ATGACGAATT TGAAGACCCT	180
5	TTTTTAAATC ATGTAGATAT AGCAAATAAA CATGACAAGA TTATTATTTT ACCTGCGACT	240
	TCTAATACGA TTAATAAAAT TGCmAATGGT ATATGTGaCA ATTTATTATT AACTATTTGT	300
	CATACAGCTT TTGrAAAAC TCTATATTTT CCAAATATGA ATTTACGAAT GTGGGAAAAT	360
10	CCAGTTACTC AAAATAATAT TCGATTATTA AAAGATTATG GTGTATCAAT ATATCCAGCA	420
	AATATTTTcAG AAAGTTATGA ATTAGCGTCA AAAACATTTA AAAAGAATGT TGTCGCACCT	480
15	GGAACCATAT AAAGTTCTGG gAATTCATTT GaGATTAGAA TATGGAAAAT CaTAAAGCGC	540
	GCKATTGATT AGTTTAATGA ATGATTGGAG TcNTTTGAAG ATnCGATTTA CAATGG	596

(2) INFORMATION FOR SEQ ID NO: 1107:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 673 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1107:

20	ACTAGCTAAA AATAATATTC TATTCTTTTT AACATGGGCA GTTCCAGCGG CAATTAGTGG	60
30	TATTTATATT AAATATATAA ACAAGGCTAC GGTAGAAAGA TTTTTTAAAT TAGTATTTTT	120
	CATATTTTCT GTTTCATTTA TTTTTGTAAT TTTAATACCA AAACCTTACAG GTGAGATACC	180
35	TAGCTATATC AATTTTGGAC TTATGAACTA TCAAAACGCT TCGTACCTTT CAGCATTTAC	240
	TGCCGGATTa GGCAATTTATT TCATTATGAA AGGTTcAGTT AAACATAAGT GGATATATGT	300
	TCTATTTACA ATAATTGATA TCCCTATTGT GTTTATACCA GGAGGGCGTG GAGGTGCTAT	360
40	TTTATTAATT CTTTACGGCT TATTTGCATT TATACTTATT ACGTTTAAAA GAGGAATACC	420
	TATCGCAGTA AAAAGCATTa TGTATATTTT TGCATTaAGC ATATCTAGTG TATTGATTTA	480
	CTTTCTTTTT ACAAAGGTT CGAATACTAG AACATTTTCA TATCTACAAG GTGGAACACT	540
45	TAATTTAGAA GGTACTTCTG GgAAGAGGAC CGATTTATGA AAAAGGTATT TACTTtATTc	600
	AACAAAGTTC GTTATTAGGC TATGGGCCAT TTAActATtA TAAActAATC GGAAATATAC	660
50	CACATAACAG CAT	673

(2) INFORMATION FOR SEQ ID NO: 1108:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 506 base pairs

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1108:

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TCACAGTGGC	GGCACAAAAA	GTAAGTGGAG	ATTATTTTAA	TTTAATTGAC	CATAACGATG	60
GCACAAATGAG	CTTTGCTGTT	GCAGATGTCA	TTGGAAAAGG	TATACCAGCT	GCTTTAGCAA	120
TGAGTATGAT	AAAGTTTGGC	ATGGATTCTT	ATGGACACTC	ACAATTACCG	AGTGATGGTT	180
TAAAACGTTT	AAATCGTGTT	GTTGAAAAGA	ATATTAATCA	AAATATGTTC	GTCACAATGT	240
TTTATGGTTT	ATATGAAGAA	ATGAACCATT	TATTGTATTG	TAGTTCAGCT	GGTCATGAGC	300
CTGGATATAT	TTATCGCGCT	GAAAAAGAAG	AATTTGAAGA	AATTTCAAGT	AGAGGTAGAG	360
TGTTAGGAAT	CAGTTCACAA	ACACGATATC	AACAACAAGA	AATTCCAATA	TACCTTGATG	420
ATTTAATTAT	CATTTTAACG	GATGGTGTGA	CTGAAGCTAG	AAAAGTGAAG	GTACCTTTAT	480
AGATAAACAA	AAACTTTTAG	AATATA				506

(2) INFORMATION FOR SEQ ID NO: 1109:

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(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 552 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1109:

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TGATATTGAA	AAAGATGTCA	TTGTTAAAGC	ACAAGAAAGT	AAAATTGCTC	AAGTTATCAC	60
GAATTTGTTA	ACGAATGCAA	TTAACTATTC	TTATGAAGAT	GGAGATATTA	ACGTTTCGTGT	120
GTATCGAGAT	GACTTTCGTG	TCATTTTCGA	AGTACAAGAT	TTTGGTATAG	GTATTAAATT	180
AGAAGACCAA	CAACGTATTT	TTGAAAGATT	TTATAGAGTA	GATAAAGCAC	GAAGTAGnAG	240
ATTCTGGTGG	GACAGGTCTT	GGATTATCAA	TTACAAAGCA	TATAGTAGAs	GCCCACCAAG	300
GCAATATTGA	AGTGAATAGT	CAAGTTGGCA	AAGGCTCAAC	GTTCAAAGTT	ATTCTAAAAG	360
ATTATAAAGA	ATAAnAATTA	AAGTGGTAAC	AGCGCGTGTA	TTTTTCACGA	AGTTGTTGCT	420
GCTTTTTTAT	TTCGTTCAAA	TCTCTATTGG	TATTAAATTA	GAGTTAATGA	AGTGAATAA	480
ATTCGGTTGT	CAATTTTGTC	ATTTGTATAT	GTGATTTGT	AAGTTATAAG	TAATAGATTG	540
TTGTGAATCA	nG					552

(2) INFORMATION FOR SEQ ID NO: 1110:

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- (A) LENGTH: 244 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1110:

10 AACAGATCAA CAATTGCAGA TCAATTACTC GTCATATTGA TCAATTATCT CTGACAACGA 60
 GTGATGATTT ATTACGTCAT TGATTGATCA TCACAAGATA AGTCGCTATT GATTTCTCAA 120
 TTTTACAACG AnATTAGGAA AGCTGnAGCA GATAATTGGC TAAGTTGGAC GATAAAGGTT 180
 15 ATCAATCGCC AATCGTTGCC ATTGAAGAAC TTTTGCTCAC TGGCGCACGC TTCAGATGAT 240
 ATTT 244

(2) INFORMATION FOR SEQ ID NO: 1111:

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(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 825 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1111:

30 AGTATTGAGT GTTTTGATTT AAGAGACTTG GAAAGTGAGT CAATAATCAA AATCTTACTC 60
 AATACTTTTA TTTTGGTACT CGCAATTTAG ATTTGTTAAC TAATTTTTTC GCTTATTATA 120
 AAACGAAACA ATCAAGTAAA CGATAAAGCC TACAAAGATA CCCAATAAAA TAGATAGTAC 180
 35 TGCCGTCACT ATTAATGGTA ATTTGAAAAA TATTGTAGG AAAATmCCAA TGATAATTGC 240
 GATAATTACT GCAAtTaATG TGA CTGTATT TTCATTGAA ATGTTcATtT ATttTCACTC 300
 CTtAACAATA ACATTATATC ATGCTATAGC TTTCCAAAAT ATTGAAATAT GTAGATATGG 360
 40 CTATTGACGA TATTTCTTAA CTTTTATATG ATTAATCGGA ATGAAAAAAG AGAAGTAGGT 420
 GGCAATATGA AGTCAAATAA ATCGCTTGCT ATGATTGTGG TAGCCATCAT TATTGTAGGT 480
 GTATTAGCAT TTCAATTTAT GAATCATACG GGTCCTTTCA AAAAGGGGAC GAATCATGAA 540
 45 ACTGTACAAG ATTTAAATGG TAAAGATAAA GTACATGTTT AAAGAGTTGT GGATGGTGAT 600
 ACATTTATTG CAAATCAAAA TGGTAAAGAA ATTAAAGTTA GGCTTATAGG GGTTGATACG 660
 CCAGAAACGG TGAAACCGAA TACGCCTGTA CAACCATTTG GCAAAGAAGC ATCAAATTAT 720
 50 AGTAAGAAGA CATTAAACAAA TCAAGATGTT TATTTAGAAT ATGATAAAGA AAACCAAnTC 780
 GCTATGGTAG ACCATTGGCG TATGTATGGA TAAGTAAAGA TCGTA 825

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(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 621 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1112:

TCCCTATAAA TCCCCACAAA AAAAGGGTAA ATCCGAACGT CAAATTTCAT CTCTTTATGC 60
 CAATCAACGA TCGATTTACC TTTTAAAATT TAAAATGTAT CTGTAATACT CTTAGCAATA 120
 TTTGTATATG CTGCATCTTC CATAGGTGGA TTGTGTAATC CTGCACGCAT GTCACGATAG 180
 TAACGTTGTA ATGGTCGATT CATTTCTAAG CTTTTAGCAC CAACTATTCT CATCGCTAAA 240
 TCAATCACTT CAAGCCCTTG ATTCATTACC ATCACTTTAC TCGCACTTGT TGGATTTCTT 300
 ATCTGACTGT CATCTTTATA TTGTTGATAC CCTTTTGCTG TACTCCATAA AAATTGTCTC 360
 GCACATAACA ATAGCGTTTC CATTTTCCCT AAATTTTGTT GCACAGTTGG CAATGTTGCA 420
 ATCGTTCCTT CAATACTATT AGGGCTATGT TGGATTGCAA AGTCTACAGC ATAATTTCTA 480
 GCAGCTTGTG CTATACCTAA ATAACAGCTT GGTATATGCA ATATCCAACC ATTTGGCGCT 540
 TTACTTTTCT CTGTTTCCAC TAAATGTTTT AATGGTACTT TTACATCATT TAATATTAAA 600
 TCATGACTTT CTGTCGCTCG C 621

(2) INFORMATION FOR SEQ ID NO: 1113:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 619 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1113:

GTACCTTGTT TTTCACTGTT AATTTCCCAA ATATAACCTG GTGTAATACC GTATTGTTTT 60
 GAGAAGTACT TGAAGGCACC TTCACTTGTA ATCATGGCAC GTTGTTCTTC TGAATGTCA 120
 TTAAATTTGT CTTTACTGTC TTTACTGTCA TTATTTAATT TTTCCAATTG AGCAATGTAT 180
 TTGTTACCTT GCTTTTCATA ATCTGCTTTA TGTTTTTTGT CGTTATCGAT AAATGTTTGT 240
 TGAATTGTTT TTACGTAATT AATACCGTTA TCTAAACTTA ACCATGCGTG TGGATCTTGT 300
 TTATCTTTGT TGCCTTCTTC ACCGTTTAAA TAGATAGGTT TAACATCTTT TGATACTGCG 360
 ATAACTTTTT TATCTTTTAA TGATTTACCA GCCTGTTCTA AGGCTTTTTT AAACCAACCG 420

ATATCyTTAG GTTtAACyTC aTAWtCaTGA GGATCTkGAC CAACAGGTAC AATACnATGA 540
 ATATCGACGT TGTCTCCACC AACATTTTTTA GCCATATCAG ATAGAATTGA ATTTCGTCGnT 600
 5 ACTACTTTnA ATTTGCCAT 619

(2) INFORMATION FOR SEQ ID NO: 1114:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 549 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1114:

GAAAACCGCA CGACAATGAA AAAAGATATC CGGTTAAAAT GGTTCGATAAT AAAATCATTTC 60
 20 CAACAAAAGA AATTAAAGAT GAAAAAATAA AAAAAGAAAT CGAAAACTTT AAGTTCTTTG 120
 TTCAATATGG TGACTTTAAA AATTTGAAAA ATTATAAAGA CGGAGATATT TCATATAATC 180
 CAGAGGTGCC GAGTTATTCG GCTAAATATC AATTAACTAA TGATGATTAT AATGTAAAC 240
 25 AATTACGCAA AAGATATGAT ATACCGACGA GTAAAGCTCC AAAGTTATTG TTAAAAGGTT 300
 CAGGGAATTT AAAAGGCTCA TCAGTTGGAT ATAAAGATAT TGAATTTACG TTTGTAGAGA 360
 AAAAAGAgGA AAATATATAC TTTAGTGaTA GCTTAGATTA TAAAAAAGC GGAGATGTAT 420
 30 AATCATGGCT CAATCAGAAT ATGAAATCAA TCCCGGAAAA AGAGAGTGAT GAAATGATAA 480
 AACGTGTAAT TAAATTAGTG CTTGGTATTA GTCTTCTGTT TTTAGTCATT AGTATGCACT 540
 35 GCTGGTTGT 549

(2) INFORMATION FOR SEQ ID NO: 1115:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1115:

TGTTATTGCA ACTATTAAAA ATATnAAAAA CAAAGACTTA ATTGATTATT CTTTATATAT 60
 TAAAAAAGGT TTAGTGGAGC CATTTATTGT ATTCTATAAT CAAGAAAATA TATTCTACAT 120
 50 TAGCAATGCT GTTATAGATA TCATCAGTGT ATCCAAAGAT ACTCTTGATT ATATAAAGTC 180
 AGAATTCAAT GATCACTGTG tTCGCCATAC TGATTTTATA GCACAGAGAA AAGCCGTAGT 240

TTATCATCTT CGATGAA

317

(2) INFORMATION FOR SEQ ID NO: 1116:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 400 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1116:

ACTATGACTG CAATGCCAAC AATGAATGTT ATTGCATAAA GCATATGCAT TTAATCAAGC 60
 TTATGTTATT TAGCAAGGGC AAGCCACTTC TCGATTCATG GCTTGCCTTA TTTTATTGTA 120
 TATTTTAAAT TATCGTTGCT GGGCCCTTGA TTGACAATCG TATTAAAATG GCCTTATTAA 180
 GTCAACTTTG TCTATACGGT TTGGAATCTT CTACCCAATG TCTTATAAAA GACAATCCCG 240
 CACCTGAAAC ATAACATCATG AAnATAAGAA nATGGTATAC CATTAATnTG AATCCATTTC 300
 CAnTTTATAA CGTTGTAAAT GACACATAAT TAGAATCATA AAGTTTTTCG TGGGATATTG 360
 AAACTTTACC CATACGAGAC ATCATGGATA AAAGCGAGGC 400

(2) INFORMATION FOR SEQ ID NO: 1117:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 696 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1117:

TGCATATAAT GTTCAAACGG CAATGATTCC ACTGTATAAA CCTCTTGTCG TGGATGATCT 60
 TTAATTTGTT GTTTTAATAA CTGAACTCTT TTTTCATGTT CATAATGAAC ATAAATAAAT 120
 GCACTAAGAT ATATCACAGC TAAAACTAGT GATGCACCTT TAATAAAATT AACATTGATT 180
 GACTTATATT TCCGAAATTC TTTTAATAAA ATAATTAAAA TGATTACATG TATCGTATAA 240
 ACAATCAAAA AATTACCTGG TTCTATTGGA GTAACAATGA CTAGTGTCGA CGCCGAAACA 300
 CATATTGCAA TAAGTAAGGA ATATAAAGTG ATTTGTGTTT TACGATCATT AATAGACAAA 360
 TAAATACCTA CAAATATCGA AAACGCAAAG TAACCACATA CAATTACGTT CACAAAACCA 420
 ACCAATCCAA TATCTGTATT TTTATTTAAT AAAAAGTATG TGTAATAATAG TAAATAATAA 480
 AGCGGTAAAG TGATAAATCC TATCATAATG ATACGACGCT TTAATATTGT TAAATGTACA 540

ATCTGACTGA AAATGACACC ATATGGAAGT GACGTTGATA TCATTTCTGC AAATTTTGAA 660
 AAGATACCTT GATTATTTGA AACTTGTTGA TATTCT 696

(2) INFORMATION FOR SEQ ID NO: 1118:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 223 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1118:

GCAGTGACAA TCAATAATTT GTAAC TAGAA GATAATAAAG AGAACGCTCT ATAGAGACGA 60
 ATTGAAGGTT TGATTTTAAT GTCTGTTAGT AAGAATCATA TCAATGAGAT GCCTATAGTA 120
 CTCAGAnTAT ATTAAATTAA AACCGTCATT AATTGTTTTT CCGAAAACCA TTTGTAACCA 180
 TTTnAATGTA GTTGGACCTA CCTACGTTCT CCAATAATCC ATT 223

(2) INFORMATION FOR SEQ ID NO: 1119:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 265 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1119:

CTGCTTTACC TTTTCCAAC TTAGAAATTG CTACATAGGG GCCTTCTGCT TTACCGCCCC 60
 AATTCCAATT CCACATTTTC AAGAAATAAG GAGGCAAAAA TGTT CATATA TGAATTGGAA 120
 TTATTTGTTT TCTTATTAGG CCGAGATGCG CCGCGTGCGG cTGCTGGAGA TGGCGGACGC 180
 GATGGATATG TTCTGCCAAG GGTGGTTTG CGCATTCACA GTTCTCCGCA AGAATTGATT 240
 GGCTCCAATT CTTGGAGTGG TGAAT 265

(2) INFORMATION FOR SEQ ID NO: 1120:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 329 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1120:

CATGACATTA CATGCTTATT TAGGTAGAGC GGGAACAGGT AAGTCTACGA AAATGTTGAC 120
 CGAAATAAAAA CAAAAaATGa AAGCAGATCC GCTTGGAGAT CCAATCATTT TAATTGCGCa 180
 5 ACTCAAAGTA CATTTCAATT AGAAcAAGCC TTTGTCaATG ATCCGGAATT AAATGGTAGT 240
 TTAAGAACAG AAGTGTGCA TTTTGAACGA TTAAGTCATC GTATTTTcCA AGAAGTTGGT 300
 AGTTATAGCG AACAAAAGTn ATCTAAAGC 329

10 (2) INFORMATION FOR SEQ ID NO: 1121:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 252 base pairs
 (B) TYPE: nucleic acid
 15 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1121:

ACACCTCTTT TTTAATATAT GTGAACTATA TATAGTGTAT AGAGAGGTTA CTTGTTACTC 60
 AATATAAACA AAAATCAACT TTGTCAAAAT AAATGTGACA AAATTAAATA AAGTGTATC 120
 25 AATGTGACAG TATAGATCAT TTTGCAAAAA GTCAAAACAA AAAAAATTGTT TTAGGGATTT 180
 TTCAAAATTT TCATTGTGGA AAATGATTTG nCAAAACAAA ACAACACnTT GTGAGCAATG 240
 AAGCTTCAAT GG 252

30 (2) INFORMATION FOR SEQ ID NO: 1122:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 35 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1122:

nAATAATAGG CGCCACCTAA TAAACCAGCT GGAATGCCTA TCATTGGTGT TGTGAATGAG 60
 CTTAATACAA TAACAAGTAT TGTTAAAGCA ATGACGTTAT ACCAAGTTAC AGTCAAATTT 120
 45 TTCAAATCCT CATATGATTG TTTTACTAAT TCTCTAAATT TCATGATTCA ATCTCTCCTT 180
 TTCTTAAATC AATTAATAGT TATACTGCAT TGCTTAAAT CAAnATATCT AATGAAGCAT 240
 CTTTTAATCG TAAGTGTTAA ATGGTTTTCT TAATCAATTT GTTTGAATGT ATAAnAGCAA 300
 TTAAGCAAA AGTAATGTAA ATGAGGGTGT ATACAACAAT TACTACAATA ACCGGCATGA 360
 AGGAAATATT ACCCATCAAT TTCATAAATG CGATTGCGGC 400

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 270 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1123:

AATACAACCT TTTATCATAG TGTAATGTA TTCTACCAGT ATTGAGAAGT TTTCATATTA 60
 TTCAATACCT GAAATCGCCA TAGTAATATT ACTAAATGCA CACTGCATAT GTTGTTTAAC 120
 AACACAACTT TAAAAATATA TTCTAACTCT ATCTACGAAT GTACTTAAAT ATCATAACAA 180
 TCTATTCCAA ATCnAATTAC ATTATTAGCT ACCTTAAAAA CCAAACCGAG GCCTTAGGCC 240
 TCGGTTTAAA TATATATAAC GnGCGACATG 270

(2) INFORMATION FOR SEQ ID NO: 1124:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1124:

GGTCTTCTGT ATCAAATTAT ATTATGAGAG TTAGACTCAG TATTAATGAA ATCGTTGATA 60
 AAGATCAAGT GCTTGCATCA CAAATAGGTG GATTACTATG ATGTTTAATC AAATTAATAA 120
 TAAAAATGAA TTAGAAGAAT CATATGAATC TGAGAAAAAA CGTATAGAGA ATGAACTGCA 180
 AAATTTAAAT GAACTTAGGC ATAGAACTCG AAAAGAAAAT GAACGTAGTT ATGATGTTTT 240
 TCAATATTTG AAGCACGAAA TGAATTATAG TGAAGATGCC CAAAGGAAAA TGACGAGAAA 300
 TATAGAAGCG TATGAGCAAG AAATCAATGA GATAATTAGA AAGCAAGAAT GGAAATTAGG 360
 AAGAATATAA AGAAGACTTA AAAAAAGTCTT ATGAAAAGCA 400

(2) INFORMATION FOR SEQ ID NO: 1125:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 377 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1125:

AAATATATTC GATCATTGAT AATATGTGCT TTACTATTCC AAATAACTTT CAAATTTTGA 120
 TAATATTCAT CAATACTCTC AATATAACTA ACCAGTTTAT ACAACCATTC GCCATCGACT 180
 5 TTCACATATT TTTGAATACT ATTTCCAAyT TtAAGACGTG TTGGTTCATT TACAAAATGC 240
 CCCAAATTAA TACCACTTAA TAATCCAAAT GGAGTTGGAC GTGTTGACAT TCTAATTAAA 300
 TATTTTAATA AACTTTCTTT AGCATCTCTA ACCTTCTTGT TATCGCCATC AAAATTTATT 360
 10 nChTGTAAG TACAATA 377

(2) INFORMATION FOR SEQ ID NO: 1126:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 227 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1126:

GTTACATTAC TGTTTCATGTC CACAACGTTT GTCAGCGATT ATCATCATTG TGTTATATCT 60
 25 TATTTATAGC AAGTGCATGG TCTGGATAAG TAAAGGTATT CATACTTAAG TAACTTGAAC 120
 ATTGGTTTAG GACTATTTTA ATGGTnCTGC TThAATTGTT GGCCAACTGG TTCTTATTTT 180
 30 AAATATGTAA CTAGCTCTAC GGGTAGTTAC TAAACACATC CTGGTTT 227

(2) INFORMATION FOR SEQ ID NO: 1127:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 717 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1127:

CCAATGATAC CGTTATAGCA TGTTAATGTT TTTGTACGAA TATAATCTAA AACTTCGAGT 60
 TCATCACTTA ATTTCCACGT TTCTGCTTTG TTTAACCACA TTAAAGGAGT ATGAATGnCA 120
 45 AAATCTTTGT CCATAGCTAG GCTTAATGTT ACGTTCATTG ATTTTATAAA ACTATCGCGA 180
 CAGTCTGGGT AGCCTGAAAA GTCTGTtTCA CATACGCCTG TAATAATATG CTTAGCCCCA 240
 50 ATTTGATAAG CTAGAGCGCC TGCAAACGAC AAGAAAAGTA AATTTCTAGC TGGAACAAAT 300
 GTATTAGGTA TACCATCTTC ATTATTAGTA ATTTCCATAT CATGTTGTGT TAATGCGTTT 360
 GGAGTAAGTT GTGATAATAA TGACATATCT AAAACGTGAT GTTTCATTCC TTGATCTTGT 420

AGTTCAACTT CTTTGAAATG TTTTTTTGCA TAAAAGAGAC ATGTTGTACT GTCTTGACCA 540
 CCACTAAAGA CAACGATGGC TTTTTCATTA TTTAATACAC TTTCCATTTT GTAATTGCTC 600
 5 CTATCATTA TAATATTAAT AAAGAGGTTA ATGGCATTGA TAAGCCCGTT TTTAATTTAT 660
 AAAATAAAAA AAGCCnATCT CCATAAAAGA TAGACGAnAG AAATGGGTTG CTCCTAT 717

(2) INFORMATION FOR SEQ ID NO: 1128:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 595 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1128:

20 GATTATTGCA TTGACAACTT ATATCTATCT AACGTTAGTA GCATTTAATT TCATTTCGGG 60
 GGTTCCTAACT TTACCAGGAT TAGCGGCGTT GGTATTAGGT GTAGGTATGG CTGTAGATGC 120
 CAATATTATC ATGTATGAGC GTATTAAGGA TGAAGTTCGA ATAGGTAGAA CGATAAAGCA 180
 25 AGCCTTTTCT AAAGCAAACA AAAGTTCATT CCTAACAATT TTTGATTCTA ACTTAACAAC 240
 AGTTATCGCC GCAGCAGTAT TATTCTTCTT CGGTGAAAGT TCAGTTAAAG GTTTCGCGAC 300
 AATGTTATTA TTAGGTATTC TAATGATCTT TGTTACAGCC GTGTTCTTAT CAAGATTCTT 360
 30 ATTATCATTA CTTGTTTCAT CAAATATATT CAAAAATCAA TTTTGGTTAT nTGGTGTTAA 420
 AAAGAATAAA CGACATGATA TTAATGAAGG TGTAGATGTT CATGACCTTA AAACCTTCATT 480
 35 CGAGAAATGG AATTTTGTTA AATTAGCTAA GCCATTAATT GGAGTAAGTA TTTTAATTGT 540
 AGTGTCGGTT AGTTATTCnT TATATCTCAA GTAACTTAG GAnTGAnTCT CAAGT 595

(2) INFORMATION FOR SEQ ID NO: 1129:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 371 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1129:

50 ATTTTAACTT TCTAAGAACA AGTTGTCAAG ATTTTTTCTT AACATATCAT GTTCTGTTAC 60
 AATATTAATA ATGAATACCG AAAGGACGAA TTGCAAATGA AAAGCGTTGG CTTAATCACA 120
 GAATATAATC CCTTTCATAA TGGGCATCAA TATCATATTA ATCAATCTAA AAAACTTACA 180

ATCTATAATA AGTTACTCGT GCAAAATGGC TTTCCACCGC TGTTTAGTTT CGGACTACCA 300
 GCAACTGCAG TTATCACTGG CGnCATTTGC GACTGCCGTT AAGCGCGGTT TTGGTGCGTA 360
 5 CATGCnTGGn G 371

(2) INFORMATION FOR SEQ ID NO: 1130:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 200 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1130:

ATGATGATGA GATTATGACT TTGCGAAAGA TATCGGTGCG CCTTATGAAT TTAAAACAnA 60
 nTAAAGACCA TGGTCGTTAC CGGTAGTTAA CTTTGCAGCT GGTGGCGTTG CGACTCCTCC 120
 AAGATGCTGC TTTAATGATG GAATTAGGTG CTGACGGTGT ATCCGTTGGA TCCGGGAATT 180
 TTAAAACCAG AAGATCCCGG 200

(2) INFORMATION FOR SEQ ID NO: 1131:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 203 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1131:

ATGAGCTAGT CGATTAAAGT TAATATTTGA AAATGAAGCA GGGCATTAAA TGCAATAAAT 60
 TAAATAAGTT GTCATTAAAG CATTAATAAT AGAAATGATT TTAACAGGAA AAAAGTGATG 120
 AATATTTGGA AAAGATATAT ATCGTGCACT GTCCTGAGAG ATTAGATTTG GGAAACCAAT 180
 TTATCCnTGA ATCGAGATGT nGC 203

(2) INFORMATION FOR SEQ ID NO: 1132:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 182 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1132:

ATCTAACAGT ATTGAAATCT TTGTTAGCGT CAATCGACCA TGTATTTTAA AGTATTGTCT 120
 CTAACAACCTT AGCAGGACGT CTTAACCCTT TAGTAAACAA TCCTTCTTTA GnTTTAGTAC 180
 5 GT 182

(2) INFORMATION FOR SEQ ID NO: 1133:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 485 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1133:

CAAATTTAGC CAGGnATACA AATACATATA ATAAAAGCTT TTGTAAGCTT ACGTTGACAA 60
 20 TCTGGCGTAA TTGGAAAAGT AATGAATTTT CTCCAAGTAG GTTTTACCCT GTAAACmAAA 120
 TAACAATTcM AATAATATGr AATCACAAG CGACTAGAAA TCCGGTAATA TGAATAATCA 180
 TATATTCAAT GTGTAAaTAAT TTTAACAGCA ATAAATAGAC AACATAATAA TTTAACGTAT 240
 25 TAATGCCGCC AACAATGATA AATTTTAAAA TTTCAGCATG CGTTTGTGTT AGTTTCATAT 300
 GTGTACTCCT CAACATCAnA ATATATGCAT AACTACGTTT TCGAACATAC TCGAATATGC 360
 GAGCCAATCC GCTTCACTTC AAATATGCTT ATTTCAATCT TTATACCCTT TCACAGCAAT 420
 30 TTAGTCTCTT TnCCCTCATC CTTATAGGCC nTATATGTAA CCGATTATCG GGTGGACTCA 480
 TTGGC 485

(2) INFORMATION FOR SEQ ID NO: 1134:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 213 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1134:

CTTGTTTTAT CGACAGATGC TGAACACGCA GTCaAAATAA ATAAATTACA TAATAAAATT 60
 CCAATTAATC TTTTCATAAT ATCATCCTTT TGTTTTTCAA TTGATATTCA TTTTCAATTA 120
 50 TAAAATATTA rAAGAATTAG TCAACGCCTG TGAGTAATAC ACATCAGTAA CATTICTATr 180
 TTCATTTATG ATATTATCTA ATTATTAATT TAT 213

(2) INFORMATION FOR SEQ ID NO: 1135:

- (A) LENGTH: 526 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1135:

10 TGTGACTCCA TGTATTCATG TATCATTGTA CATTTGTGAA TTGGTTGAAA ACTGATAGTG 60
 CCCGTTTAAT TACAGGTA CT GAGGATGCTT TCAGGACATG GATTGTTCG AAAATATGAC 120
 AATATTTTAC TATGGCTCTT CACTTCTCTA GGGAAATTGC TATCTTGATT AATCCAATCA 180
 15 ACCAATTCAC CTAATGGTGT GTCATCACCA AGAAACTTT GCATAAATTC GTAAAAGCTC 240
 AATACCTCAC CTCGATTaAT ATACTTGAGC CATTaATATA ATACCATAAA AGAATGTGTA 300
 TTTTaCATAA AACTTTTTTaT AAAGCAATTT TATAAATCTA AATTTATTGA ATGTTTAAGA 360
 20 AGTTGTGTAT AATGAAATAA ACGTGTGAA ATAGTTAGGA TGATGTTAGT GGATATCAAA 420
 CATATGAAAT ATTnTATTGA AGTCGTTAAG CAnGGAGGCA TGACTAATGC TTCCAAATCA 480
 TTATATATTG CACAACCTAC AATTAGGAAA GChATTAAAG ATATTG 526

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(2) INFORMATION FOR SEQ ID NO: 1136:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1136:

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AGCAAAAGCA ATGATGACAA AAGAACAAGC TATGTTAGCA GATGGAAGTA TTAAACAAGA 60
 TCAATATGAT AAACAACGTG TATCGAnAAT CGGAAAATCA CAATTAGATG AATTGTCCTC 120
 40 TAAAGATTTA CAAGTTTTAG CTATTTTTCC GAGAGATGAA TGCAGGAACA GTTTTAGATC 180
 CACAAATGAT AAAAnATGGA AGATGTTTCTAG TGCAAAAAGA GTATGGCAGC AGTTTTCTCC 240
 AGCAACTTTT CCAnATTTTAC CCAGGTGTTT AACACGTCCT ATTGGATTTG GGCTTAGGAC 300
 45 AATTATTCCA TATGGGCGGA T 321

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(2) INFORMATION FOR SEQ ID NO: 1137:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 330 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1137:

ATAAATCCTT ATAAATCAT GAGTTGGACG ACTTATCCAC ACAATTATAC TTTTTCAGTT 60
 5 CTCTATATGT CAAATACCTG TGAATATGTT GCTAAAAATA GTATAACTTT GTGTGTAATT 120
 TCTAATTATC CACAATTCTG AAAACTATAA ATGTGCATAA GTGGATAmCT TTcCTTCTAT 180
 AGAGTATCTG TTAGTGAGTG TATCAAAaCA GTTTGGGAAa TAATTtATAA AGTnTGTATA 240
 10 AGAnCTGTAT AAGGTGTTCTG AACATTGTAA ACACTCATGC TTCGGACCAA ACTCATGGTG 300
 ATGTTATGAA ATTTGATTGC TCGCATCGnG 330

(2) INFORMATION FOR SEQ ID NO: 1138:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 459 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1138:

CTTGATAAGG GAAGATTTGC CAGCACCATT CGGGCCCATG ATACCAATTA TTTCGCCGCG 60
 25 TACTGGTATC GATAAGGAAA TGTTTTTAAG TACATGCTTA TTACCTAAAA ACAGATTTAA 120
 ATCTTTTGTT TCTAACAAAC GTTTATACCT CCTAATTAAA AGTTTAGGCT AACCTAATTA 180
 30 ATTGTATAAT AAAGTGAGAA TATTTATCAT GTCAAGTAAA TTCGTGATAT AATATAGACA 240
 ATGTATGTGA GGTGAAAGTA TGTTAACTGA AGAAAAAGAG GACTATTTAA AGGCAATCCT 300
 TACGAATAAT GGCGATAAAA ACTTTGTGAC AAATAAAATC TTATCTCAAT TTTTAAATAT 360
 35 TAAGCCTCCA TCTGTAAGTG AAATGGTAGG ACGTCTTGAA AAAGCAGGCT aTGTTGAAAC 420
 AAAACCATAC AAAGGTGTTA GATTAACAGA GGATGGTTT 459

(2) INFORMATION FOR SEQ ID NO: 1139:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 165 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1139:

TAAATACTCT CGCCGGTTAT TTCGCTTCCT CTATACGGAT TGGCGAAAGA TACGGTGCAT 60
 50 CGGTTTCAAC TAGCAAACGC TCCATTGACA CATGCTTAGC AACTTCTTTA GGCTGTTTAG 120

(2) INFORMATION FOR SEQ ID NO: 1140:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 214 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1140:

ACCTGAATGC CCATCAATGA CAGACTGGAT AAAGAAAATA TGGTACATAT aCACTATGGA 60
 ATACTATGCA GCCAGAAAAA AATGAGGTCA TATCTTTTGT GGGACATAGA TGCAGCTGGA 120
 GGCCATTATA TTTAGTAAAC TAATGCAGGA ACAGAAAAAC AAATACTGCA TGTTCACACA 180
 GCAGGAGCTG AATGATGACA ATTCATGAAC ATAA 214

(2) INFORMATION FOR SEQ ID NO: 1141:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 229 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1141:

GTTTCTAGTT GTTTATAGTT ATCGCATCTC TTGATGTAAA ATCTAAGATG TTTATGCATT 60
 TCTAGATGTT AATTCTTCGC TGCTTAAGAA TTATCTTGAT GGTAATCTA GTTGTGCCAT 120
 GCATTTTCTC ATGATGAATC TAAGGTGTTA ATTCATTGAT GTGTGCTGTT TCTTGnnGCT 180
 TCATTATCTT GATGGTGAAT TTCGTTGTCT AATGCACTTT TTCAAATGA 229

(2) INFORMATION FOR SEQ ID NO: 1142:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 311 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1142:

TTATGAATCG TAAACACTAT TATGAAATTG CGAGAGTAGT ATGGACAATT AGAATGATGG 60
 TTTGAGATnA ATGAGTGTTA TTAACCAAGTG CGTCATTTTC AAAATTAGAT GCCATTTGCT 120
 GTTTATAATA AGAAGATTTG ATAATTAACCT ATGATAAGAA AAAATAATAA TCCCCTAAAT 180

GGTAAATGTG TGAATAGGAA TATCGTTaAA CTAGTTGTGT TCATGCTAAT TTTAGTTGTA 300
GCAGTAGCGG G 311

(2) INFORMATION FOR SEQ ID NO: 1143:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 403 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1143:

GATCATGCTG CTTATGAATT ATTAAAAGAG CAATTAGAAG ATGTGCTTGA TACATTAAC 60
GATAGAGrAG AAAATGTATT ACGATTAAGA TTTGGTCTTG ATGACGGCAG AACAGAACA 120
CTTGAAGAAG TTGGTAAAGT TTTGGGTGTT ACACGTGAAC GTATTCGACA AATTGAAGCA 180
AAAGCACTTA GAAAATTAAG ACATCCAAGT CGTAGTAAAC GTTTGAAAGA CTTTATGGAT 240
TAATTTATAT CAATTTTAAT GATTGATACC AAGACATGAA TAAGCGCTTA TTTATTTT 300
GATTAAAGATT TAACTTGAGT GAGGTTGGTA CATTGAATAA TGTTCACCT CTTTTTTCAT 360
AAAGGAGAAT AAAATGATTT CGTTAAATAA CCGATTAACG ACn 403

(2) INFORMATION FOR SEQ ID NO: 1144:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 612 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1144:

nTTTTTATTG ACGAATnGAT TTGGATGCCA GTGGTTTGGT CCTAAATCTT GAATGGTAAT 60
CGGTATTTTG AAGTTGTCAT GTGCTACACG GTAACCGATA CChATAAGTA CGAGTGCGAT 120
GACAATGGTT GTTACGAGCA AGATGTATTG TAACCATTGC TTGAACACAA CAAGTTGTAT 180
ATAAGGCTTC ATTGACGATA CCTCCAAACC AATACAGCTA AATTAATTAT CAAAAGTGCG 240
ATGAAsCTAA GATAGAAACT AGGGTGCAGT TCTAAAATGT AGTTGTTTAA AATAATTTCT 300
AACAAATTGAT TTGTTACAAC TGCGAACGGT TGAATATTGA AACACCATT TGCTATATGT 360
TGTAACAAAAA TCGTAGGTAT TGTTAAACCA GATAACACCA GGATGACAAT AGCTAATATG 420
ACTTTACTAA TACTATTCAA CAAGCCTGTT GTTAAAAGTT CGATGAGTAA TAACCACAGT 480

AAGATATTCG GAATACTGAA CACAATCCAA ACTACACCAA CGATACTCCA TAACATAGTA 600
TAAAACCATG Tn 612

(2) INFORMATION FOR SEQ ID NO: 1145:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 223 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1145:

GAATTAATTA CGCAATATCC GCATCTTAAA TCAGTAATCG AAAAATATGC TTTAAAAATAA 60
AAGTGATCAA TGAAGTGGTT TGAAGGTTGT nAATAAACCT TTGAGTCACT TCCATTTTTA 120
AAAGTATCCT GGATGGAACC AGAATAGATT TGAAGCTTCA GCGGTTTTTA ATGAAAATAG 180
CCATTAAATG ATTTGGAAAC GGTAAGAGGG GGTATTTTAA ATG 223

(2) INFORMATION FOR SEQ ID NO: 1146:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 598 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1146:

CGCTACGGTT GTCACGTAGA GATTAAAGAC ATTCGTTTTA GCAGTCTTTT TTATTGAAGT 60
AGACAATGCA AGATTAAATG GTAGTGT CAT TTCATTTTAT TCAACTGCTA GTAATACAAT 120
ACTCAGTGTT ATTTCTGAAG ACTGGTTGAT AATGAGACAT GCATATTTAC AAAACTGTGT 180
ATATTGTGTA TATTGTATAT ATACAGAAGT TGATAGGGGG ACGTTGATGA AAATAATTTT 240
AAAAACAAT AGTGATTTTC CGATTTATGA ACAGATTAAG CAACAAGTAA AACAAAATAT 300
TTTAAAGGGA CATGTTGCTC CTGGAGAGCA TTTGCCGTCA ATGAGAGAAC TTGCCAAAGA 360
TCTTCAAGTA AGTTTGATTA CTACCAAACG TGCTTATGAA GATTTAGAGA AAGACGGTTT 420
TGTTACAACA ATTAGAGGAA AAGGGACCTT TGTTAAGGAG CAAGATAGTT CTATTTTAAA 480
AGAGAAACAA TTTTACCA TGAAAATTTG GGTAAAGGA ATTGGGTAA TTAAGCnCAA 540
GCCCATCCGA ATTGCCACTT GAGGGAnTTC CAGGATATTT nACCGTCATT TATTGAGG 598

(2) INFORMATION FOR SEQ ID NO: 1147:

- (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1147:

10 CAAATCCAAG TGCAACAGCT TTATCAACCG CTAAAGCTAA ATCCGTATCA GCTTTTTTCAG 60
 CTTGAACTGG TTTGATTTGT AACTGTTCTG TTAGAAGTTG GCGTTCCTCT TTA CTGACTG 120
 AATCAAAGTC TCCCACTGAG AAAAAAGGGA TAATTTGATG CTTCAATAAA ATCAAAGCAC 180
 15 CTCTATCAAC GCCGCCCAT TTACCTTCAT TACTTTTGGC CCAAATATCT TGCGGCAAGT 240
 GTCGATCAGA ACATAATAAA TTTATATGCA TATACTCA ACCTTTCAAT GCTTGTGTGA 300
 CTTTTTAAAA TCCCCTGGTT AAAGGAAAAT GAACnGGTTA CCAGCATTGT AGGCACCATT 360
 20 TCAACACCAA CTTCGGCGGA TCnGGATTAC GCCTCCATCC 400

(2) INFORMATION FOR SEQ ID NO: 1148:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 352 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1148:

TTTTATGGGT CGTATTTTTT AAAGAACAGT CATCTCAATC AAAAGAATAG AATTATGATT 60
 35 AAAATTGATG TrGTGTAATT AAAGTAAGAA ATrrkAAATT TCCTAGATAC TAGATAAATC 120
 GTTCAATATT TTATTAATAA GGAGGCCAAT GAYTGTGAAT TATCTTAAAC ATAAGTTTTA 180
 TAACTTGTTA ACTACAATGA TTGTTCTCTT TATTTTTGTA CTTTCTGGTG CGATTTTTTT 240
 40 AACATTTCTA GGGTTTGGTT TATATGGATT AAGTAGAATA CTTATTTATT TTAGGTTGGG 300
 TGACTTTACA TATAATAGAA GTATGTACGA TAACCTATnA TATTATGGCA GT 352

(2) INFORMATION FOR SEQ ID NO: 1149:

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- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 916 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1149:

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	GGCAAGTGTC GATCAGAACA TAATAAATTT ATATGCATAT ACACTCAACC TTTCAATGCT	120
	TGTGTGACTT TTTTATAATC CTCTTGTTTA AAGAAAAATG AACCTGTTAC TAGCATTGTA	180
5	GCACCATTTT CAACACAAAC TTTTCGCTGTA TCGGTATTTA CGCCTCCATC AACTTCAATA	240
	TCAAAGTTTA ATTGACGTTT CATTTTAATA GCATTAAGAC CCGCTATTTT TTCTACGCAT	300
	TGATCAATAA ATGATTGACC ACCAAACCCT GGGkTAACTG TCATCACTAG TACATAATCA	360
10	ACAATGTCTA AAATAGGkTC AATTTGTGAT ATkGGkGTAC CAGGATTAAT TACTACACCA	420
	GCTTTTTTAT CTAATGTTT AATCATTTGA ATAGCACGAT GAATATGAGG CGTTGATTCTG	480
15	ACATGAATTG AAATCATATC GGCACCATGT TCTGCAAATG ATGCAATATA CTTTTCTGGA	540
	TTTTCAATCA TCAAATGTAC GTCTATAGGT AATGTTGTGC CTTTTCTTAC TGCATCTAAT	600
	ATTGGTAAAC CAATAGATAT ATTAGGCACA AATTGACCAT CCATAACATC AAAATGAACT	660
20	CCGTCGACGC CTGCTTCTTC AAGTCGTTTT AATTCATGTT GTAAATCCAA AAAATCAACA	720
	GATAATAATG ATGGATATAG TTTTGTCAAT TAATATCTAA CCTTTCTATT TGAAATTTCA	780
	TTAAATAGTT GTAAATAATG GTCGTATCTA AATTGCGCAA TATTCCTAT CTCTAATTGA	840
25	TGChTAACCA TTACCATTAG GGTCTTGGn AAGGnTACCA ATCCCAAACC TTACCATGGT	900
	TCCCCCATAA CGGTTT	916

(2) INFORMATION FOR SEQ ID NO: 1150:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 400 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1150:

40	AATTGGTTGT GGCTTCATAA TGTGCAGTTG CTAGACTGAC AACAAACATCG TTTTCTAAGC	60
	CTACGATAAA GACATAATCG TTTTCGGTTT TGTTGTTTTT TAATGAGCGT TTGATGATAC	120
	GTTTATCTTC AGTTAAAGAT AAATTTAACT TAGTATCGTA AAGTTTAAGT GCTTCGTTGT	180
45	AATGTGGATC TTTGACAGAT TGAATGGTTT TAAATCCAT AAGAACACCT CCCCATTTA	240
	AATAATATTA TAGCATAATC GCCTGCTGTA AAAGACTGTT CATAAACTTT TAAATGGTAT	300
	AAAAaACTGT ACTATCTTAA ATTAGACAGT ACAGTAATCT CATTTTGAAT TCAGTGTGAT	360
50	AACTAAGCtT TGGGACCTTT AGATGCnTTC ACAAATGTG	400

(2) INFORMATION FOR SEQ ID NO: 1151:

- (A) LENGTH: 156 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1151:

10 CACCGTAGTT GCTACCGAAT ACCACCATGT CGCCAGGTTG TGCTAAGAAG TCCGGTGTAT 60
 TTTGGTATAC AGTTAGCTAA TCCGTCGAAG TTGTTAGCGA CGGnATATCT TTTGACCTAA 120
 ACCTTTTAGA GTAATCCAAA CAAACTTTC CAACCA 156

15 (2) INFORMATION FOR SEQ ID NO: 1152:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 233 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1152:

25 TCAATATATT TATTTTCTAA TGTTAGCATT AGACTGTCAA TTAACCTGCT AAGTTGTTCT 60
 TTTTtagTAA TTAAATAACG CATATAATCA TCTAAATTTT TCATTTTTTC ATCTAGCATT 120
 30 AAAAGGtagT GCTTGATATT ATTTCTACTG TTGCTCCAAA AACTGnTCAA ATATACGTCA 180
 CATAGTCATA CTACACCTTT ATATAGTTTA AATACCAATn GCATGACCTC GTG 233

(2) INFORMATION FOR SEQ ID NO: 1153:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 339 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1153:

45 TATATTAnCT ATCGTTTtagT GAATCGTTTT TTTAAAGTAA AGAGAATTTc ATATATTACT 60
 GGTACAActA CAAGTGTTAA TAAAGTTGAT GAAATTmAAC CACCAATAAC TGtagCAGCT 120
 AATCCTTTcG AAATAAGAAT CGnGCTATCT TGACCAAATA ACAnAGGAAC TAATGCACCA 180
 50 ATTGTTGCAA TCGCCGTCAT TAATATCGGT CTAATTCTAG TACCGCCTGC TTCGATTAAT 240
 GCTTCTTTCA TCTCCATGCC CTGTTGCTCA TTATTAATAA CACGGTCTAT TAACACAATG 300
 GCATTTGTTA CTACGATnCC AATTCAACAT TAGCATACC 339

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(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 817 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1154:

10 GTCACCCGAG GAGATATnCA ACTATTACCA TCAAGATGnG AAAAATGGTg CCTTGGGCAA 60
 TTGGTTTTTT CATTTTAATC TTAATTATTA TATTGTTCTT TTTACTAAGA AACTTCAATT 120
 15 CACCTGAAGC GCAAACATAA ATATTAGTGA ATGCGATTGA GAATAATGAT AAACAAAAAG 180
 TAGCAACATT ATTAAGTACT AAAGATAATA AAGTAGATTG TGAAGAAGCA AAAGTATACA 240
 TTAACATAT CAAAGATGAA GTTGGGCTTA AGCAATTTGT CAGCGACCTT AAAAATACGG 300
 20 TACATAAAAT GAATAAGAGT AAGACCAGCG TAgtCTTCTTA TATTCAAACC AGATCTGGTC 360
 AAAATATATT ACGTGTAAGT AAAAATGGCA CACGTTATAT CTTTTTCGAT AATATGAGCT 420
 TTACTGCACC TACCAAGCAA CCAATTGTTA AACCAGAAAGA AAAAACAAAA TATGAGTTTA 480
 25 AATCTGGTGG TAAGAAAAAG ATGGTTATAG CTGAAGCAAA TAAAGTGACG CCAATAGGTA 540
 ATTTTATACC GGGGACATAT AGAATTCCAG CTATGAAATC AACTGAGAAC GGTGATTTTG 600
 CAGGCCATTT AAAATTTGAT TTTAGACAAA GTAATTCTGA AACGGTAGAT GTTACTGAAG 660
 30 ATTTTGAAGA aGCAAATATA TCTGTAACTT TAAAAGGCGA TACAAAATTA AATGaTAGTT 720
 CTAAAAAGT AACTATAAAT GaCCATGAAA TGGCATTTTC AAGTTCCAAA ACGTATGGTC 780
 35 CATATCCACA AAATAAAGAT ATTACCATTT CCAGCTT 817

(2) INFORMATION FOR SEQ ID NO: 1155:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 322 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1155:

40 AnAGAAAATC TACTCTTTTA TTTCACCGGT CCTTTCnTAT CTCTCATTG GCATACTCCT 60
 TTTTCCATAT TTTCCACTTT CAnTACAGTG AATTTACATG TAATTTTACA AATACAATAG 120
 GAGTGCACAA TGGAATATAA CACTTATCTT TATAAAATTA TTTTATATAT TGaCGCACTT 180
 AAAACAATCT ACAAATAAAA TTATTATTTT TAGTTTTCAA TGAATAATTC ATTCTTATCT 240

ATTTAAAAAT ACATTTAACT GC

322

(2) INFORMATION FOR SEQ ID NO: 1156:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 777 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1156:

5	GTTTCCAAnG GAAnGnGAA AGCGTCAACC AATGTAACTA TTTAAAGTCA AAGTGTGTTGA	60
15	CCAAATTTGA CTTAATATGT AAAATAATGA GTAACAGTTA TTACAAGGAG GAAATATAGA	120
	TGAATTTAAT TCCTACAGTT ATTGAAACAA CAAACCGCGG TGAACGTGCA TATGATATAT	180
20	ACTCACGTTT ATTAAAAGAC CGTATTATTA TGTTAGGTTT ACAAATTGAT GACAACGTAG	240
	CAAATTCAAT CGTATCACAG TTATTATTCT TACAAGCGCA AGACTCAGAG AAAGATATTT	300
	ATTTATACAT TAATTCACCA GGTGGAAGTG TAACAGCTGG TTTTGCATT TATGATACAA	360
25	TTCAACACAT TAAACCTGAT GTTCAAACAA TTTGTATCGG TATGGCTGCA TCAATGGGAT	420
	CATTCTTATT AGCAGCTGGT GCAAAAGGTA AACGTTTCGC GTTACCAAAT GCAGAAGTAA	480
	TGATTCACCA ACCATTAGGT GGTGCTCAAG GACAAGCAAC TGAAATCGAA ATTGCTGCAA	540
30	ATCACATTTT AAAACACGT GAAAAATTAA ACCGCATTTT ATCAGAGCGT ACTGGTCAAA	600
	GTATTGAAAA AATACAAAAA gACACaGATC GTGaTaaCTT CTTAACTGCA GAAGAAGCTA	660
35	AAGAATATGG CTTAATTGAT GAAGTGATGG TACCTGAAAC AAAATAATTC AAAGTAAAGA	720
	GTAGACTAAG CnGTCTGCnC TTTTGTATG AGTAAACCAA GGTGTCAATA ATTTGTn	777

(2) INFORMATION FOR SEQ ID NO: 1157:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 155 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1157:

50	TAATGTTGGT AAATGGGTTA AGGCTCAAGG TCGTATTGAA GAAGATACAT TTATTAGAGA	60
	TTTAGTTATG ATGATGTCTG ATATTGAAGA GATTAAAAAA GCGACAAAAA AAGATnAGGC	120
	TGAAGAAAGC GTGTAGAATT CCACTTGCAT ACTGC	155

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1158:

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10  GACTGGTAAA ATTTACTTGC AAGTAAAGCT AAAAGGTCAA ATAGATAAAG AACAACTTGT      60
    TTTTCAAAAT GACAAAAATG AAGAATTTCC TTTTGTTATA AAAGATGAAA AGGATGACAC      120
    AATAGTAAGA ATTTTAATTG AACAGCATAT GGATAAAATC AATATGCATG TTAAAACGTT      180
15  GGCTGAAAAG AAAAATCTAG ATAACAAAGA AATGGTGTAT TCTATTCATT TTAAAGAGAA      240
    AAAAGTACAA CATGATGATG CAAAAGAAGT GCCTTCAAAA CATCAAATC AAGAAAATAA      300
20  TCAAGATCAG CTTAAAAAG ATATTGATGA CAAAAGAT AGTCAAAAAT CAGATACTAA      360
    GGGAAAGACG TACTAGCCTT TTTACTGGAA AAAGGGTTTA      400
  
```

(2) INFORMATION FOR SEQ ID NO: 1159:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 347 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1159:

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35  GTTGGTACAG TGTTGAGTGG CTTTGAATAT CGAACACAAA AAGAAAAGTA TGACAATTTA      60
    TATAAATTTT TCAAAGATAA TGAAGAGAAA TACCAATATA CAGGCTTTAC AAAAGAAGCA      120
    ATAAACAAGA CGCAAAATGT CGsATATAAA AATGAATATT TTTATATCAC TTA CTGTCa      180
40  AGAAGCTTAA AAGAATATCG TAAGTATTAC GAACCATTsa TTCATAAAAA TGATAAAGAA      240
    TTTAAAGAGG ATGGACCAGC CAGAAAGAGT GATTACGCGC TATCAGTCAG TACACATGTT      300
    AGTCCAGGAA TTTCTAGCAT CnGTGTGTGA ATGAnGGGTA CTTTATn      347
  
```

(2) INFORMATION FOR SEQ ID NO: 1160:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 203 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

ATAGTTATTA ATTAGTAGAA TGAGGATATT TAAATATAAA GGATAGTGTT GAACTTATGG 60
 ACATGAATTT CGATTATACA TGAACGGTGT TGTAGAACAA GCAAGGAATG AAATTGAATC 120
 5 TCGGGGATAT GAGCAATTAA CTACTGCAGA AGATGTTGnA AAGTCCAAGA TGGnCACCTA 180
 GTTATGATCA TCTGTATGTG GTG 203

10 (2) INFORMATION FOR SEQ ID NO: 1161:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 203 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1161:

20 AATTTTCCnT TTCCATTGAC ATAACAATAT TTAATGGGGC CCAGTTACAG GAAATATCAG 60
 TTTAATTTTCG TCTTCAATAC CATAGTCATA ATATTGAGTT TCTTGTGTTG GAAAATTTCC 120
 25 TACATAGTTA CTCATTTTAA TTTGThCAAT GTTTGAATTC GGAGGCACTC TGTTAGCATA 180
 TCTTTAAACA TTAAATATGG ATA 203

(2) INFORMATION FOR SEQ ID NO: 1162:

30 (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 220 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 35 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1162:

40 GCCATTTTGT TGATAAAGGT ATACTAAAGG TTATCGTTTT GAAATTTTTTA GTAAC TAGGA 60
 TATGTTTCGT GTTATAGGAC CGGAATTTGT GGTATACGGT AAAATTTTAA TGCTATTGGA 120
 ATTTTTAAAA ATGGAAAAAC ATGGACATTh AAATTGGAAT TTCATAATAT GTCCTAATTG 180
 45 GACTTAACTT GTTGGGAGTT CATTTTACTA TTTnTATGGT 220

(2) INFORMATION FOR SEQ ID NO: 1163:

50 (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 409 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 55 (D) TOPOLOGY: linear

TTCACGTGCT TTGCCATCTT TTAAGAAAAA CACAGAAGGC TTTTGCAATT GATTGTAATT 60
 GGATGCCATA GAGTAATGAT ATGCACCAGT TGATAATATA GCAAGATAGT CTCCACGTTT 120
 5 GACTGGATGA AGGTAATTTA GCGTCTTTAA TAATGATATC ACCAGACTCA CATAATTTTC 180
 CAGCTATAGT TACACTGtCA TCTGCTTCTT CATTTCTATT AACAAGCAAT GCTTGATACT 240
 TTGCGTCATA AAGTGCAGTT CTGATATGAT CACTCATACC GCCATCGATT GAAACATATT 300
 10 TATTAtTCTC TGAATTTTCT TTAATGGtTC CAACTTCATA TAAAGTAACG CCAGCtTCAC 360
 CTACAATTGA TCGTCCCGGT TCAATACCTA TTTCTGGTGC ATCTATACC 409

(2) INFORMATION FOR SEQ ID NO: 1164:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 20 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1164:

25 CTAAATAATT GTTAAATTT TTCTTTACTA TTTAGACTCT TTCGTTTGCC ATGACTTTGT 60
 TGACTTGCAA TGATATGAAC TTAATTTTTG CGAAAAAAGG AATCTAGATT CATATATTCTG 120
 30 GTAAATCTAC CTTCTTCATC TTTTGAAGT TGTAATTCTA GCAATTCACG TTGTATCAAA 180
 TTTTGAATAA CCATTGTAAT ATCACGTGGT TGCATAGTTG AGCCCTTCTG AAGCAATTCA 240
 ATTGAAGGCG TTTATTTGAG TTTCGAAGCA TAAATCAATT TAAGCAAAAG ACTAAATCTG 300
 35 CTCATCTAAA CCTAAGTCAC GTAAGGTCTA ATAATCnCTC GTATCACTAC GGTCTGCTTT 360
 AATGATATTA nCCAGTnCGT GCCCCTTTAA ATTAACCAaA 400

(2) INFORMATION FOR SEQ ID NO: 1165:

- 40 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 327 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 45 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1165:

50 TCGTGATTAT TATTAACATT TTTTAGTAAT TGATAAAAAT CTTTCTCGC TTCTGTAGGG 60
 CTAGTGATAA TCATATAAAC CCTCCTTTGT TTTCTGTTAC GCTAATTATA GCGTACGCAC 120
 TTGAGTACGT CATATTACCA ACGAGTTCAT CGTATnCTTA ATACCTATAT GCTATCGTTC 180

GGACACACTA CCGTnCCCTA CCGCTTAACC ATTTTCGGGC TTAAATATTT TnAAAATTTT 300
 GTGAGGATCC GCTTAAAAAA CCCATA 327

(2) INFORMATION FOR SEQ ID NO: 1166:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 148 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1166:

TTAGGATTTT AAAAATATGT CAGGTTTTCT AACATAAAGC TTAAACATT GATATAACTG 60
 CGATTTTCGAC TTCTAAACG aCATrAAACA ATCTACAGCT AAAATATTTT TTCAATTTTT 120
 AAAAATAATC nGATAAATCT CCGCAAAA 148

(2) INFORMATION FOR SEQ ID NO: 1167:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 243 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1167:

nAAGGTTATC GCTCGTAAAG ATGTTGTTGA AGAAGTATTT GACGACAGAG ATGAAGTGGa 60
 TTTAAGTACA GCGCTTGTTA AAACCCTGCA TATGAAATTG GTGTATTACG AGAAGAGTAC 120
 ACTAAAGTTT TGGTCGTGTA GGTCTCAGCA GCGAACAGCA GTATGCACGT CTnCGTGTGC 180
 TGACGTGAAT TTTATTTGAG GATTATAGAC AAGAGAGACA ACTTACTGGA TTTTGCCCTG 240
 TTG 243

(2) INFORMATION FOR SEQ ID NO: 1168:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1168:

TTATATACTA CTATAAAGTA ATCCAACCTCT CAAGAAGGTA AATGGGCAAT CAAAAGCTAA 60

CTACGATATG ACGCACAAAT GTTTAGGGTA GGTGTTGACA TGTGTACAAA AACCAGCAGA 180
 AAATGGTTGT ATTCTTAGGG AAGCATTCAT CCTGTTTGTT TATGGATTCA TGTTACGTTA 240
 5 CGCAATATGT TTTTATGTAG CACAGCGAAG TTACAAGTTT ATACGCTATA TATCCnTTGA 300
 TnATAAGCAG ATGAAAnCGG C 321

(2) INFORMATION FOR SEQ ID NO: 1169:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 191 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1169:

20 TCTACATATA AAATTACTCT AAAAATATGT ATAGTCATAA ATTGTTGGTT GATTTAATTA 60
 AAAGTATGGA AATTAAGGGG CTCTTATGTA TATAAAAAAA TGAATTATGA TAAAATGTAA 120
 GAnAATATTT AGGGTCGATT GGAGAGATAC CAGTGGTACC AATTAGAAGA CGACAGTTTA 180
 25 ATGTTACCAT A 191

(2) INFORMATION FOR SEQ ID NO: 1170:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 303 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1170:

AATGTGGCAA GGATGTGTGA TATGACTACA CATTTAATAT CATCCTACAT AATAATTTTG 60
 40 CGCGCCAAAT TATCACACAT ACCACACCTA CGATAACAAC CAGCAAATAA GGAGATAGCT 120
 ACACGTATTT ATCGTCCAAC GCACTACTAT ATGTTGTTGn ATGGGCACAA GTTACAAGTG 180
 CTGCGCGATA nCAAAAGGTA TACCCCTAAA ACGTCCCAAA AnAATCGGTT GCCCTCTAAA 240
 45 TTGTTTGTGT GCCATGATTA GTAAGCTCCT ATGTTAGAAA CAAATTTTTA ATATGTATAT 300
 TAG 303

(2) INFORMATION FOR SEQ ID NO: 1171:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 299 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1171:

5 AAAAAGGTGA GAAGACAATA ACGnACGCCA AACTAAAAA ATCCATTAAC TGGAGAAATT 60
 ATTAGTAAAG GTGAATCGAA AGAAGAwATC ACAAAGATC CAGTTAATGA ATTAACAGAA 120
 10 TTCGGTGGCG AGAAAATACC GCAAGtCATA AAGATATCTT TGATCCAAAC TTACCAACAG 180
 ATCAAACGGA AAAAGTACCA GGTAAACCAG GAATCAAGAA TCCAGACACA GGAAAAGTGA 240
 TCGAaGAGCC AGTGGATGAT GTGATTAAAC ACGGACCAA AACGGGTACA CCAGAAACA 299

(2) INFORMATION FOR SEQ ID NO: 1172:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 821 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1172:

25 CCATAGCACC ATACCCATAA CCAACCCGGA TCCACTAACA AATAAGTAAT AATTnACACG 60
 TAAAGAAGTA AATAGTTTGT TTAGTTTTTT ATCAACATTA TCAATGTTTT CCTCGACAGA 120
 30 CACTGGAATT TTAACGATAG CTGTACCATT TGTAATTGAG TAGTTCGTTA TTTCACCCAT 180
 ACTACTATTT GGTAaaATTG TTAATTCTCC TGAAATTGTA TTGATTCTGT TTGAACGAAG 240
 TCCAATTGAT TTAAGTGTTC CCTCTGCTAC AGTTGTACCA CCGTTATTTA TCTTAACATA 300
 35 ATCACCTACA TCAAATTGGC TTTCAAATAT AATAAAGAAT CCTGTAAtTA CGTCTTTAAC 360
 TATAGTTTGA GCACCAAAAC CTACTGCTAA GCCTACGACA CCAGCACTGG CAATTACCCC 420
 TTCAACACTA ATGCCAAATT TACTTAAAAT CGTCGTAATA ACTATAAACC AAACGATATA 480
 40 CTTCACTACA TTTTGAACAA GAGATATTAA AGTTTTAGAG CGCTTTTTGT TACTCTTTTT 540
 ACTTTTATTT TGAATCTTAA ATCCCTGTTT AATCATTTTA TTCAGTATTT TAATAACTAT 600
 GAGGGCTACG ATAATATAAA TAACAATCAT AGCGATTTTA GTTGCAATGT TTTCATATGT 660
 45 TTCTATTTTT GTTAATGGCT CAAATAGAGA TGAAATAATA TTCATGACTT GATTCATGAT 720
 AAGCGTTACT CCCTTCTATA TGATATATCA ATATTGtATT CATATTTtga TATACTTCCC 780
 50 AACCTACGAA AGTCTCAATA TATCTAGAAT CAAATGGTCA C 821

(2) INFORMATION FOR SEQ ID NO: 1173:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 318 base pairs

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1173:

CCCCGAAATTA AAATAATAAT GTATGAATTT TTAAATATGA TTTAAACGTT TTCAGTTTTT	60
ATGAAAACGC ATGCATTTTA CAAATAAAAA TGGTACGATG GCACTGGTTA AAACGTTTTA	120
CTAAAAACAA ATCATGAGGT GTATAACATG GCTGTCTCTT GATCAGATCT TGATCCCCTG	180
CGCCATCAGA TCCTTGGCGG CAAGAAAGCC ATCCAGTTTA CTTTGCAGGG CTTCCCAACC	240
TTCCCAGAGG nCGCCCCAGC TGGnCAATTC CGGTTGCTT GCTGTCCATA AAACGCCCCA	300
GTCTAGCTAT CGCCATGT	318

(2) INFORMATION FOR SEQ ID NO: 1174:

20

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 206 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1174:

GTTTTAAAGC GGTTATAAAG GTAAATATGC AATATTATAA ATATCTTCTT CAGAACTAAC	60
CGAATCTCTT AAATCATCT GTTTAGATAG CGTTTCAAAT TGATAAGTTT TAATTTTAAC	120
CGTTACAGTT TTAGCTGACT GCTGTAATTT ATTTGACGTG CAGCTGTTTT CCTGACAATn	180
CCATACTGTC TTAAAnCTCT GCATCA	206

35

(2) INFORMATION FOR SEQ ID NO: 1175:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 653 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1175:

TCTGCATCAT GATATTTTAC ATCATCACTT ATAAGAACGT CACCTACATT TAACTTTCA	60
TCTAAAGCTC CAGCAGAACC TGTATTAATA ATGACGTCCG GTTTAACTT ATTAATTAAT	120
AATGTCGTAG AAATTGCAGC ATTAACTTTT CCAATGCCAC TTTGGGTAAT CACTACTTCT	180
CTATCTTTTA AAATGCCAGT ATAAAATTTA ACATGTGCAA CTGaAATTTT GCTTAATTGT	240

55

TTTTGATTCA CCTCTTTTAA AAAATCCTAG CATTGTGTTAT TTTATCACAT TTTAATCACT 360
 ACAACGACAA GTATCATGAT TTTCATTACT GTATAAAACT TTGCTTTAT TTTTATAAAA 420
 5 AGCTCTTTCA ATAACCTGGT ATCATAAATA ATTATTTTTG AACTCATAAC AGTGAATTCG 480
 ATGCTTCTAA TTTGTCTATT TTTCAAAAAC TAATCATATC AATTACATCA ACCAATCGTG 540
 10 TCAAGAAACT TTATTAAATA ACAGGAAAAT GATATGTTTA AAATAATAAT GATGAAATAA 600
 GAGGATTTTA CAATGGCTGA AAATAATCAA AATAGTCTCG TAACAAAGAT AGC 653

(2) INFORMATION FOR SEQ ID NO: 1176:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 410 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1176:

ACATGGCCGT TnGnATCAAG ATCGTCAACG ATTGATTGGT ACAATTGAAG TGCCTATGAC 60
 25 ATTGGCAACC GTTGGCGGTG GTACAAAAGT ATTACCAATT TGCTAAAGCT TCATTAGAGC 120
 TACTAAATGT AGAGTCAGCA CAAGAATTAG GTCATGTAGT TGCTGCCGTT GGTTTAGCGC 180
 30 AAACTTTGC AGCATGTCGC GCGCTTGTGT CAGAAGGTAT TCAACAAGGT CATATGAGTT 240
 TACAATATAA ATCATTAGCT ATCGTTGTAG GGGCAAAAGG TGATGAAATT GCTAAAGtAG 300
 tGAAGCTTgA AAAAAGAACC CCGTGCAAAT ACACAAGCAG CGGAACATAT TTTACAAGAA 360
 35 ATTAGACAcA ATAGTAAAgG CGAtAGCGAT TaaAGAAAGT TAAGTCAGTC 410

(2) INFORMATION FOR SEQ ID NO: 1177:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 146 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1177:

CATCAAGATA ACTACGGTTA TAATCCAAAC GACCCAACAT CATATACTA TACTTACACT 60
 50 ATTGATGGCA CAAGGTAACCT ACCATTACAC ATGGGAAAGG TAACTnGCAT CCAAGTCAAT 120
 TAAACCAAGA TAATGGCTAC TACAGC 146

(2) INFORMATION FOR SEQ ID NO: 1178:

- (A) LENGTH: 225 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1178:

10 TGTTCCTGGT GGAACTTTGG TTTCTTAATG TCATTCCAAA TTGCTGTATA TTCATTCAATT 60
 GGTATTGAAC TTATAGGTGT ACTGCTGGTG AACGAAAGAT CTGAAAAAAC CTTACCGAAG 120
 CAATTAATAA TGTACTATCC GTATTTATAT CTATATCGTG GTnATATAAT ATGTCATCAA 180
 15 CTGGATnTAC GTCAATAGAC CTTGTAACC TTAATATCGC GACAT 225

(2) INFORMATION FOR SEQ ID NO: 1179:

(i) SEQUENCE CHARACTERISTICS:

20

- (A) LENGTH: 319 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1179:

TGTACGCATA TGGTATCACT TGATGACCAA TTCACCTTGT CGAGAATAAC GTTATTTAAA 60
 30 GACATTGATT TAAAGAATTG GTATTnCGTT AATTGTATTA GACTTTTCAC AGAAGTAGCG 120
 ACAACAATGA TTTCATCGTA ACACGTGCGC ATATnAAGCA TGGGAAAAGA CATGGnCTAT 180
 TGACCTGGCC TTTTGTGCAC TCGTACGATT GGTCAAACGT GGCTATATTG AAAGTTTGAA 240
 35 ACAAGATGCG ACGGACACAC ATGCACGGGT GGGGATAGAT CTTGAGTCTT ATTGAGACGC 300
 TGTGACTGTG GCTGACATC 319

(2) INFORMATION FOR SEQ ID NO: 1180:

40

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 654 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1180:

50 TTTTATCTTG GTTTTGAAC AGATATGTGT AGTCAGGTAT AACATAATCA ATCCCTAATA 60
 AGTTATCATC AGGGAATTTG ATACCTGCAT CGATAATGAC AATTCGTCT TTATACTCAA 120
 CTGCATAAGT ATTTTTACCG ATTTACCTA GACCTCCAAG TGCATATACA CCTACTTCAT 180

55

TTCGTAATCT AAATGTGCGC CCTCTAATTT AGTGATAAAT TCGATATTAA AATTACGATC 300
 TTTCAAGTAA CGACGTACTT GTTCTTCTGT TTGAGCTTCA ACATAAAGTG ATTGTGTATT 360
 5 TTCACGCACA ATTACCTCGT CTCTGTTATG TTGATAaAAA ACTTTAAATA CTGCCATGTT 420
 AAAAAATTCCT CCTAAGAATG TTTGTYTAAT TTATTGTTAA CCCTAGtAAA ATCGTATTGG 480
 AGTATATATC GATAAATTCA TTCCAATCAT CTCTATAATG TAACTTAATA ACGATTGTTG 540
 10 TAATAACTAG GTTCATCATG TCGTTCATTT TAAAAAATTA GTGAAATAAC ACTAAAATTT 600
 CAGTTAAATC TTATTTTACA TGATGAATGA TAATAAATAA AGCAGTTTAT CTCA 654

(2) INFORMATION FOR SEQ ID NO: 1181:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 231 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1181:

CGGGTATATT ATAGACAACG TTTAAGGACT TCTTTTAAAC TAACTTGTTA AATGTTGCTG 60
 TATTTTTGTA TTCAACACTG TAATATAGTT CTTCTGACGC TGATGCATTA CTCATTGTAA 120
 TAGATATTAA AAGACTCAAT ATTATTaAC TAATAATAGC GCGCTTTATG ATTTTCATAT 180
 30 TCTAATCTCA AATGAATTCC AGAACTTTAT ATGGTTCAGG TGCGACAACA T 231

(2) INFORMATION FOR SEQ ID NO: 1182:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 245 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1182:

TAAGTTTATT AAGCTCTTGT CCGTTAGCAA TCACGCTACC GCTAGAAATT TGGTCAATTG 60
 45 AACTTAGTAC ATTTAATAAG GTTGTCTTAC CTGATCCAGA AGGCCCCATA ATCGCACGAA 120
 TTCGCCTTTT TGTATGTCAA GTAATATCTT AGGCTGAATG GTGCTTTACG AGTTTGAACA 180
 GTGCCGAAAA CGCAAGCCCC TTGATATCTT AAATGTGGAG ACTACAACnC ATCAGTGnCA 240
 50 CGGGA 245

(2) INFORMATION FOR SEQ ID NO: 1183:

- (A) LENGTH: 490 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1183:

10 AGGTAAAGAT GATGGTGTAG AAGTTTATGT GCATTGCGAA GATCATGGCA TTGTATTTAA 60
 TGCAAGTCTA CCTTTGTACA AAGATGCCAT CCATCAAAAA GGATCAATGC GTAGTAATGA 120
 CAACGGTGAT GATATGAGTA TGATGGTGGG TACAGTGCTG AGTGGCTTTG AATATCGAGC 180
 15 GCAAAAAGAA AAGTATGATA ATTTATATAA ATTTTAAAA GAAAATGAAA AGCAATATCA 240
 ATATACAGGT TTTACTAAAG AAGCAATTAA CAAGACGCAA AACGTCGGGT ATCAAAATGA 300
 ATATTTTAT ATTACATATT TATCAAGAAA TTTAAAAGAA TATAGAAAAT ATTACGAACC 360
 20 ATTGATACAT AARCAATGAT AAAGAGTTtA AAGAAGGTAT GCAACGAGCT AGAAnAGAGC 420
 TAAACTATnC TGCTAATACA AATACTGTAG CAACGTTGTT TAGTACGAAT GATGAAAGGA 480
 ATAGAAAAGA 490

25

(2) INFORMATION FOR SEQ ID NO: 1184:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 153 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1184:

35 CTCGCATTTT AATAAATCAT ACTCTTCTTT TCTTGCATAC GAATTAGAAT AACTCGCGAG 60
 ACCTATAAGT CTCTTTCCTC ACTAGATAGT TTACTCTTTT GGTChGTTGA AGTCAATAAT 120
 40 TTTATCTAAA GCTATAAAAA ATCTTTTGAT AGC 153

(2) INFORMATION FOR SEQ ID NO: 1185:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 164 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1185:

50 TCATTTATAT ACTGTATCAC GCTATCTTTA GTATGTGTGC ATnATCATTC GTTAGTGCGT 60

55

AATGAACGTT ATATTTTAAT TCATGATTTA CTAAGACCAA CAAT

164

(2) INFORMATION FOR SEQ ID NO: 1186:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 143 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1186:

CACAAGTGAC GTCATATTAT AAAAGTCACT CGGTTTGGCA TACGTTCTGT CTAAGAAATA 60

GCGACGTGCA ATTTTCATATT TTnTATAAAC ATCCGTTGAA AAAGGACATA AAACCATGCG 120

TTGAACCAGG GTCTATACTT TCT 143

(2) INFORMATION FOR SEQ ID NO: 1187:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 209 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1187:

CGTACAAGTT AAAACGTTTA TACGATTACG AAAAACCACC GAAGAGTGAG AAAGATCCAA 60

TGGTTGTATA TGCACTAAGT GCAGGATACA AATGGTTCTT TGCTTATCCA GATGAACATA 120

TAGAGACTGT TAATACATTA nCAATCCCTA AAGATGTCTG TTTATTAGCT CAGCATGAnC 180

ATACAGTTCG GTCACATAGT GTCAATTCA 209

(2) INFORMATION FOR SEQ ID NO: 1188:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 243 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1188:

TTGGAATCGC TGTCGACGGA TAGCAACCTG GATTGTAAAA ATAATGTTGG CTTTAAAAAT 60

ACCGTGGCAA TATTAAATGA ATAATCGCTG CTGAATATAC ACCCAATGCA CATTGAACTA 120

ACATAAnCCC ATTTGACTCA TCTACGCCCA CTATTGGCTT TATAGTCACT GAACTAAGCT 180

TAT

243

(2) INFORMATION FOR SEQ ID NO: 1189:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 527 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1189:

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CACCAGGCAT TACCATACCA GCACTCATAC CACCAATCAC kCTCGATAAC ATCAATACCG      60
AAAAATTGTG GCCAACTGCA AACATAAATT CTGACACTGA AAACAAAATT AATCCTATAC      120
ATATAATTAA TTTCTTCCCT AATTTGTCAG CTAGCGTACC ACCAAACGGC GATATAATCA      180
TTTGAGATAA CGCAAAAGCA GCAACTAGTA ATCCTAAATC ACTACCAGTT AATCCCAAAT      240
CTTTTAAATA AACAGGCAAG ACTGGTATTA CTAAACCGaT ACCTAAAAAA ATCAAGAAAA      300
TATTAAATA TAAGACAAAA ATCTGTTTAT TCATATGCTC ACCTCTTTT TCTCCATGTC      360
ATGCTTAAAG CTGTTATTCT TCTTTTCCAC GACAGATTGC AATTCATGCT AAATATTTCG      420
AAAAAGTTTC TATATTGTAT TACAACATTG CTACATTGTA CAATATTTTt TCTTTGTAAT      480
TATCACTATn TTCCATTTAA TTGTATAATT AATGACATAT TnnAATA                    527

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(2) INFORMATION FOR SEQ ID NO: 1190:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 889 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1190:

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AAAACGTGGC AGTAATTCAG TGTATGTTCA ATATGATGAT ATTATGTTTT TTGAATCATC      60
AACAAAATCT CACAGACTCA TTGCCCATTT AGATAACCGT CAAATTGAAT TTTATGGTAA      120
TTTAAAAGAA CTGAGTCAAT TAGATGATCG TTTCTTTAGA TGTCATAATA GCTTTGTCGT      180
CAATCGCCAT AATATTGAAT CTATAGATTC GAAAGAGCGA ATTGTCTATT TTAAAAATAA      240
AGAACACTGC TATGCATCGG TGaGAAACGT TAAAAAAATA TAATAAGATA ATAAAGTCAG      300
TTAACGGCGT ATTCAATTGT AAATCTTGTT GGATTTTAAC AAGATAACTA GCAAATGCAC      360
TGTATAGCTG GCTTTTTAAT TTTATTAACA AAATTAAATA TGACGCGTGA ATTAAAAAAT      420

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CTCTACAATC CTATGGCGCA ATTTTAAACA AAATATACTA AATLTGAAAT TGACAGTTTC 540
 CATAAATAAA ATGCTATAAT TTCCTACTCC GTGAATCTTA TTTTGTTTAA AAAAACAGTG 600
 5 TAGCACAAGm TTCAACTTGT TTCCTACACT GTTTTATAAA TGAATTATTT AAAATGCTTG 660
 TTCAACCTCT TGTAATGTTG GCAAATATT AATAGCACCA TACTTCGTTG TCACTATTGC 720
 10 AGCAACGCGA TTGCTAAACG CTAAAATTTC CTCACCTTCA TTTTCAAATA ACTGAGTTAA 780
 ATTTAACACA TCGGTTGCTA AAATCCTGCT AATAACTGCA CCAATAAATG CATCCCCTGC 840
 CCCAGTTGTA TCAACAGGTT TTACCTTATA GCCACTATGA TAATGATTA 889

(2) INFORMATION FOR SEQ ID NO: 1191:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 254 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1191:

25 AGTTAAAGGC GTTGAATTAA TGGCCTTCCC ACACATGACA TATAACAAG CGTGCGCCTA 60
 TGGTCTGATA ACCAGATACA CGTTTGAATG GATTAATTGC GTTCTCAATT AGGCGTGATA 120
 TGGCTTTAAA GATTTnAGTC TGTTGAAATG ATGGTGAATT AAAGCATTGC GCTAAAGGTG 180
 30 CACTGACAAT ATCTCGTAAA GATATGGTGC TTTAACAGAT TTGTAACATC TATGGTCTAA 240
 nGATACGGGG TTAA 254

(2) INFORMATION FOR SEQ ID NO: 1192:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 189 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1192:

45 GGCTCATAAG TTACACCTAA TGCATCTTCA TCTGGAAGCT GTGGTTTATC ATCTTCTAAA 60
 TCAGCAGTTG GCGTTTTTTC ATATAATTCC TTTGGCGCAC CAAGATACGC TAATAATTGA 120
 GCTGTGTATn CTAGGCATCC ATACCGTATT CGTTAAACCA GTATATTTCA GCTGAATGAT 180
 50 CTGTCCTAC 189

(2) INFORMATION FOR SEQ ID NO: 1193:

- (A) LENGTH: 215 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1193:

10 TTGATATTGA TCGATGACCG GTGATGTGAA ACTGAACTG ACCAATGAAT GAAAAAATGG 60
 GCAATGTTTT TGACAACAAT GGTCAATTAC CAAATAAAAA TATTGnCACCT ATTAATACCT 120
 GnCAAAACGTG TTTGTTCTTA AACCTAAAAT GATAAATCCT ATTGAGATTA TGGACTTGGT 180
 15 AAGCTGCAAT CTTTTTAATA TCTTTATAAG CAATG 215

(2) INFORMATION FOR SEQ ID NO: 1194:

(i) SEQUENCE CHARACTERISTICS:

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- (A) LENGTH: 158 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1194:

AGAATTTGCh ACTGGTTTAC CAACGCATCT ATGTTCCGGTC GCTATACCGC ATACAGATGT 60
 30 CGAACATATT AACCATAGAA CGTAGGTGTG GTGTTCTAGA AAAAGAAGTG CCGTTATTGA 120
 AATGGGACAC TTGATCAACA GCCGAGTGAA ATCGTTTT 158

(2) INFORMATION FOR SEQ ID NO: 1195:

35

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 180 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1195:

45 ACTGATTGCC GTGTCTGTGG TTGATCATTG ACTAATTGTT GGCCATCATT GGnTTCTTGG 60
 TCTAATAGTC CTCTTGCTCC TGCCTCGTAA CATTGATGCC AATCATGCAC CACAGCCTTT 120
 CGGTTTCATCA TAACATTTCT GCCAATGTCT CTACATGACA CGGGCTCATA TTTCTTTCTG 180

50

(2) INFORMATION FOR SEQ ID NO: 1196:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 274 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1196:

5 GTTAAAGCGA ATTATTCACA ATATAAAAAA TCATCTGATC AAGTCGTATT AGAATTAGGT 60
 ACAAATGGCG ACTTTACTGT CAAACAGCTC GACGATTTAC TTAATCAATT TGGaAAAGCC 120
 AAGATTTATT TAGTTAATAC ACGTGTTCa AGAaTTTmTG AGGgCAAATG TAAATCGATT 180
 10 ATTaGCTGAC GCGGgCGAAA CGGAAGTCCC AATGGTCACA TTAATTGGAT TGGGTATTAG 240
 GCGCTTCACA AGGGACCTTG GTGGAATATT TTTG 274

(2) INFORMATION FOR SEQ ID NO: 1197:

15 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 154 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 20 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1197:

25 ACGTAACCTA TATTCATCTC TGTTCCCAAT AATAATAACA ATACATAACT GATATTAGCT 60
 GTCTTTTCATC TCTAATTAAT ATGCGTCATG AGCTAATATC GGTATTATTTT TTGTGTCAAA 120
 nAATTTTTTAT TTTATCTCTC CATCGCATTa ATTG 154

30 (2) INFORMATION FOR SEQ ID NO: 1198:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 249 base pairs
 (B) TYPE: nucleic acid
 35 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1198:

AATCCTCACC CGTAATAAAC TCGTTTTTGAA TGC GTTGTTc GAACTCACGG TATATTAAAG 60
 CAATATCCTC TAACCTATTT TTAGTTCGAG TTTGCATATT TTTATCAGCA ATAAAGTGTT 120
 45 CTAAATGTTC AGGCGTTACT GCATATTTTT TAAATCTTG AATTTGTTCT GTTAATTTTT 180
 CACTAAACCC ATAATATTTT GCTTGTGATT GATAAAGTTT TAAATACTTT TGTGTTCnT 240
 GAACAATGn 249

50 (2) INFORMATION FOR SEQ ID NO: 1199:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 165 base pairs

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(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1199:

TTGCTAAAAA TCGACATCAA ATACTAAATC TGATCCATCT GAATCCCATG TTTAAAACCG	60
AACTTGTGCA TTAATTGTAA AGTTCAAACCT CTTTCATCTTC ATAGATCGCG ATGCGTCTTT	120
TAATTCTTTA GGTGATACTT TGTAGATCTA TAACAAAATT AnCTA	165

(2) INFORMATION FOR SEQ ID NO: 1200:

15

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 236 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1200:

TTATTAGCGA TTAAAAATAT GTCCTTTTTT AATAAAGGAG ATATATGTTT AATTGGATGT	60
CAACATCGGA GTCATTGGCG AAAAATAGGG CTGCGGTCGA TGGAGTTCAA AACTATTTTA	120
ATGCATTACA TGTTGTGAGT nAAGAGCAGG CGTACTTTTC TTTTCAAGGA TGTGACATAT	180
CACAGAGCGT ACAATAGAAA CTCAGATACC ATTACATGGA nAGTCCGCGT CCAATG	236

30

(2) INFORMATION FOR SEQ ID NO: 1201:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 146 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1201:

TAATGCTAAA CAGTATTATG GAGATAATGG CTTAGTTCAA ATTTCTGATG nAAGTCAACA	60
CTTCTAAAAT TTGTAAATGA AGCATTAGAC AATAACGAAC AATCAGTTGA AGATTACAAA	120
AATGGTAAAG GCAAAGCTAT GGGCTT	146

45

(2) INFORMATION FOR SEQ ID NO: 1202:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 385 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1202:

ATTGATGATA GTATTGATGG TAATACCATA AACATACAGC ATTATCACAA GTAAAAGTAA 60
 5 GCCTAAATGT CCATAAAATC TACTTGTCAC AATATATGTC GGTATTATCG TAACGGGAAG 120
 TCATTTTCGTA CTTGATTAAA CTTTGTGTGA ATTGCTTTAG TACCTTCTAA ATACCTGGTT 180
 GATGAGACCA CATACTGATA CCACCATAAC CATAAACAAA AGGTACACCA GAATTGGGCA 240
 10 TACTTCTTAT TCCATCCAAA CCTCCGTAAC CTAATTGCTA CGGGTAATAT TCCAGCACAC 300
 TAATAGTATT GATGTAATTA ACTGAACGGC CGCTnGATAA TAAGTCTTAC AGTCTTAAAC 360
 15 GTCCATGCGC ATChTnACCC ATTCA 385

(2) INFORMATION FOR SEQ ID NO: 1203:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 580 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1203:

ACATTGAACG AGTACAGAAA ACTTATTGnA AATAAAGGCT GTTAAAGATA AAGAAGAAGA 60
 TACTTACAGA GGTAAGTATT TTGCGGAAGA AAGAAAAAAC GAAAAATTGG AAAAAAGAAA 120
 30 TATAAACTA AAAAAACAAA TTTATGAATT ACAAACGAA GAAGATAACG AGGAGGACGA 180
 AGAAGACAAG GAGGACGAGA ACGATGTATT ACAAATTGG TGAGATAAAA AACAAAATTA 240
 35 TAAGCTTTAA CGGGTTTGAA TTTAAAGTGT CTGTGATGAA GAGACATGAC GGTATCAGTA 300
 TACAAATCAA GGATATGAAT AATGTTCCAC TTAAATCGTT TCATGTCATA GATTTAAGCG 360
 AACTATATAT TGCGACGGAT GCAATGCGTG AyGTTATAAA CGAATGGATT GAAAATAACA 420
 40 CAGATGAACA GGACAACTA ATTAACCTAG TCATGAAATG GTAGGAGGTA TGAnAAGTGA 480
 ATGATTTACA AGAGAGAGAA TTAGAAACAT TCGAACAAGA CGACCGATTG AAAGTAACTG 540
 ATCTAGACAG TGCTAACTGG GTTTTTTnAG AAACnGGAT 580

(2) INFORMATION FOR SEQ ID NO: 1204:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 139 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

ATCGTATGGT TGAGGCGAAT TTAAGTAAA AATTAGACAA CGAATCTTGA TGAAAAGAnA 60
 ATGATTGGCT AAAATAGCAG CTAATCAAAT CAACGATAAT GAATGCTTAT TTATCGTGCT 120
 5 GGTTCATCTA CATTGGAGC 139

(2) INFORMATION FOR SEQ ID NO: 1205:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 229 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1205:

AGGAGGATAT CAGaCTTACA rACTATTCTT TATCATACTG rAATTCAAAT AGACACCTTA 60
 20 ATTGaAGaAG GCGTTGACGC GCTACTTTTC rAAACGTATT ACGACCTnGG AAGnGTTAAC 120
 AAATGTCATT TCCACGGAAC GGGGAAAGGA AATACGGCGT TGCCAATCCA TTGCTCCAAT 180
 TGAACCGGTT GCAAACACAA ATTGACTTGG TTGAAGGGGC AGGCATGCA 229

(2) INFORMATION FOR SEQ ID NO: 1206:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 399 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1206:

TCGACAAGTT TTTAACAGTT CGTTATTATA TGAATGTAAG TAAAAATTTT TTAGCTACAA 60
 CTTACATATT ATAAATGCAT AAATTAAACA AAAAGGGGCG AAAAAAGTTG ACTCATTAT 120
 40 CAGATTTAGA TATTGCGAAT CAATCAACAC TACAACCAAT TAAGGATATT GCTGCATCAG 180
 TAGGTATTTT AGAGGATGCA TTAGAACCTT ATGGTCATTA CAAAGCTAAA ATCGACATTA 240
 ATTAAAATTa CGCCAAGAGa AAACAAAGGG AAgTTGTTTT aGTAACTGc GATGaGCCCA 300
 45 ACACCAGCTG GTGaAGGtAA tCmACGGTTA CAGTTGGtTT AGCTGaTGcA TTCCmTGaGT 360
 TaATgAAAAC GTTATGGTTG ccTTaGGGGG CCTGCCTTT 399

(2) INFORMATION FOR SEQ ID NO: 1207:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 138 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1207:

ATAAAACAATA CGATTTGTAT GCTACTTGTC TGAAGACAAC ATAAACAAT ATGTTAACTG 60
 5 ATATTGAGGA TATGGGCTTT CAAATCCAn TTCAAAAAAG GTTATGTTGA AATATGACGC 120
 GGTGTTGAA AGAGACCC 138

(2) INFORMATION FOR SEQ ID NO: 1208:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 655 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1208:

20 AGTCGCCTAA CTTTTATTAT CAGTCCAATC AGTTTCATCA AGTATAAATG TTATTGCTTA 60
 TTTTGTATT CTGGCGTAT TTTTGTCT TCTGCATAGC GCTCTGGATT TTTCTTATAA 120
 AAATCTTGGT GATAGTCTTC GGCTTTGTAA AATTGTGACG CTGGTAATAT TTTGTTGCA 180
 25 ATTGCCTTAT CAGCATTAAT CGTATTTTTA AGCTGCTCGA TATAAGTCTC AGCGAGTTCT 240
 TTTTGATGAT CATTAGTGTA GAAATAGCT GTTnATATT GAGGACCACG GTCTTGATAT 300
 TGACCACCTG TATCTAATGG GTCAATGACT GAGAAAAATA TTTCTAATAA CTTATTGTAT 360
 30 GAGAATAATG CAACATCATA TTGAATTTCA ACAGTTTCTA AATGACCACT CGTACCTGAT 420
 TTTACTTGTT CGTAAGTAGG ATTTTCAATA TGCCGCCCA TATATCCAGA AGTTACTTTT 480
 TCTATGCCGT CAAAGGTGTC AAATGGTTTC GTCATACACC AAAAGCAACC TCCGGCAAAA 540
 35 TAAGCTGTAT TAATATTCAT TTTTGACATC CTTCCATTA GACCTTAGTA CGATTTATTA 600
 AGAAATCACT TGCTTTTTGA ATTGTTTTTA TATAACGTTA ATAnGnGATT ATnAT 655

40 (2) INFORMATION FOR SEQ ID NO: 1209:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 213 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 45 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1209:

50 CCGnCCCCAA TGGAAATTAC CTTTGGTnCC CCATTTTAAT TGTTAAATTA TTGGAGTGTT 60

AATCTCACTA TCTTCAAATA AGCTTGTGTA TAGTTTAACA GCTTCTTCAG CTTGGTTATT 180
 AACATTAAA AATGTCGTGA TTTTGGGAAT ATC 213

(2) INFORMATION FOR SEQ ID NO: 1210:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 149 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1210:

TTGATTGCAA CTTTGATAGT GAAAACATTT ACATGATGTT GTCACTGGTG CACGGGCGTC 60
 GAGAACAATC ATTGCGTTAT TGACGGTGCT GCCCTGCTGT CTCAGTTTGT TGATGCAAGC 120
 ACTACACGAA ACCCAATAGC nTCACCAGG 149

(2) INFORMATION FOR SEQ ID NO: 1211:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 142 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1211:

AATGTTTCTC CTAATTTTAA ATGTTTAGGA ATATTAATA GGATAATAAA TCCAGCGACA 60
 TCCCAAATGG GATTCATATA AGAATGTTGG ATGATAATnT TGGCCGTTAA TATACATATT 120
 TTCTATTATA AAATTGGGCA AA 142

(2) INFORMATION FOR SEQ ID NO: 1212:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 163 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1212:

TTTAAATTTA GTCACCTTCAC CTTTTAAAGC ATGTTTCATAA AATGTTTGCA TCATCAATGC 60
 ACGTTCTGAA CCAGAGCCTT CAACACAAAG ATAAATTTGT ACAGCAATAC CGCCTCTAAC 120
 TCTTCGTTGC GATGATGGCA ATACCACTCA ATCCAACGCT CnG 163

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 765 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1213:

5 GTCACCTTTC ACGTCTTGAA GAAAAAGGCT ATATAAGAAG AGATCCAACG AAACCACGTG 60
 CTATAGAAAT TGTAAGTGAT CAAACAAATG ATAATATTAA TATGGAAGAA ACGATTTCATG 120
 15 TGCCAGTTAT TGGTAAAGTC ACAGCAGGTG TTCCTATTAC CGCAGTAGAA AATATTGAAG 180
 AATATTTTCC ATTACCTGAA CACTTAACAT CGACACACAA TAGCGACATA TTCATATTAA 240
 ACGTCGTAGG CGACAGTATG ATTGAGGCTG GTATATTAGA CGGAGACAAA GTAATTGTnC 300
 20 GCAGTCAAAC CATAGCAGAA AATGGAGACA TTATTGTTGC TATGACTGAG GAAGATGAAG 360
 CAACTGTCAA ACGCTTCTAT AAAGAAAAAA ATCGTTATCG ATTACAACCT GAAAATAGTA 420
 CAATGGAGCC AATTACCTA GACAATGTTG CTGTAATTGG GaAAGTAATT GGTtTGtACC 480
 25 GCGAAATGTA ATATTTTAAA CCGTTATATA TTATCGTAAT TGTTAAGCCC TCATTTTTTAT 540
 AAATTTTGGG nCTCTTGAAA AAGTTACGTT TTCAAGAGGT TTTATTTATT CTAATCTAAA 600
 TTCAGTTCAA ACAGAAATTG CGAATTGTTA GATAATCTCA TTCTTTA-TA TAAATnTTGA 660
 30 ATTACAGATT TCTGCAAAAT GTTACACAAA TTAAAACTCG CCCCCGTAAT AATTTCAGG 720
 AGCGAGCCAT TATTATTTTT TTCnTTCTTT TTTATTAAGT ATATC 765

(2) INFORMATION FOR SEQ ID NO: 1214:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 495 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1214:

45 AGTTGCCATC AAAAATACAG AACCTAATnA TnACCTTTTA TGATTTTTTG TGAATTCAAA 60
 GTCACCTTCT TTTTnAAGCT TTAAATTTCT CCCCATTTTT TTAGCCCCCT ATAAGGATTG 120
 AATATCAATG CCTTCTTTCA TTAAATTTTC TCTAATTTTC GAAACAAATA ATAATGCATG 180
 50 TTCTCCATCA CCATGCACAC AAATTGTATC TGCTTGTAAC GTTACTTCCT TATTGTTTTT 240
 TGAAATAACT TTATyyyCct TCACCATCTT TAAAACCTGC TTAAGTGCTT CGTCAGTATC 300

ATCAGCAAAC ACTTCAGAAG CTGTAATTAA TCCGACATTC TTTGCTTCTG AAATTAGATA 420
 TGAATTTGCT AATCCTACTA ACACTAGTGA TGGATCAAAG TCATAAACAG CTTGTGCTAT 480
 5 AACGTTTGCh ATTnC 495

(2) INFORMATION FOR SEQ ID NO: 1215:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 243 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1215:

AnTGTCcAGG TACCCGTGGT CCAAATTCG ATGTACGTAG ACCATTGnCT CGTATTTGTC 60
 AGATTGTGTT AATGATTGTC TCTGTATTAG GAAGTTTATT CTCCATTTTA ACAATTAGAA 120
 AAATAGATCC GTTAAAGGCG ATTGGGTAGG AGGTGTGCAA ATGTTGAAAT TGAAATGTAC 180
 AAGTCATTAA GTGGATCTAC ATGAGCGTAA GGTcATTGGA ATAGGTTTGC TGTGACTCGC 240
 25 CGA 243

(2) INFORMATION FOR SEQ ID NO: 1216:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 256 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1216:

GGGCTTCTTT CTAAAATAAC TAAGTGAATT ATCTATATAT GAAGAGGTCT CCAATACTTT 60
 TTATATAATT CGTGATTACA TTCTATACTT TTAATTGTAT TTTCTGCGTA GGAAAGTGGT 120
 TTTATTAATT CGATTAGTTC GAACTACAnT CAAGAAAAGG TAAAATTTGT GCATGAGCAA 180
 GAGAAACATA CCTGAACCAA AGGCACCCGA ACAGTACCTA GGCCTAAGCG GCTAATTATA 240
 45 AATGCTCAAG CGCAnG 256

(2) INFORMATION FOR SEQ ID NO: 1217:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1217:

5 TTTATTTTTT CTTCTAAACG AAACATTGCT TCTTTTGTG ATTGTTTGT ATTCTTGTTT 60
 AACACAACAC TTACGCGCTT CCATTATCT GTGTATGGAT CTTTATACTT CTCGTAGTAT 120
 CTGTATTTAG TTTCGTTATT TTTGTTTTTA AATTTTCAA TCCACATGTT TATACCTCCT 180
 10 GAGAGAACGT ACGTTCTGTA AATTTGTAAA AAATAATAAG GGTAGGTGGG CTACCCAAAA 240
 TTTAGTACTA GGTACTAAAT ATGTTATAAT AAAATAAAAA GTAGGTGATA AGATGACTCA 300
 ATTTCTAGGG GCGCTTCTTC TTACAGGAGT TTTAGGTAC ATACCATATA AATATCTAAC 360
 15 AATGATAGGT TTAGTTAGTG AAAAAACAA GATTATCAAT 400

(2) INFORMATION FOR SEQ ID NO: 1218:

(i) SEQUENCE CHARACTERISTICS:

- 20 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1218:

CCAAGTGTC ATTTTAGATG ATTTTTTTGT TGACCTATCG CCTTAACTGA AGAAACTGAT 60
 30 AAATCATCCA TTTCAAAAAT AGGTCTAGAA AAATCTGTTT CGAAGGtCTT AAACGATTCA 120
 TATCAGGAAT ATTTTAAATC GTTATATCAT TTTCTGTTAA TAATACATCT ACTTGCTTTA 180
 CGGGATCTAA CGAAGTTGTT TTAGATAATT CTTTCATCCA TTTATTTAAA CCTTCAGCTA 240
 35 ACGATTCTAT ATTTTCAATA TCCATCGTCA TACCTGCAGC CATATGATGG CCGCCAAATT 300
 TAGCGATTAA CTCTTGATGT GCTGATAGTA TTTCAAACAT CGACACTTGA TCAATTGATC 360
 40 TGGCGGAGCT TTTGCATGAT TTTGCTCCCT ATCAATATTT 400

(2) INFORMATION FOR SEQ ID NO: 1219:

(i) SEQUENCE CHARACTERISTICS:

- 45 (A) LENGTH: 458 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1219:

50 AAGATATTAG ACATAAAATC TAAAnACAGC AGTAAGATGA TTTATGATTA GAAACTATCT 60
 TACTGCTGTT CACTTTTTAT AATACTTCTG AATGTCTTCA CTTATACTTC TAGTCACAGA 120
 55

GCATTCATTT CTTGTcTAGC AACGTTCTAC TCTAGCGGAA nTAAtTAGCT ACCATCCTCG 240
 CTAAGAACCT TTCTTGACTT GTGACAATCG CTTGCTTCTT TCCTCTCCTT CGGcTCTCGC 300
 5 TTACTCATTT AGCTCTACTA AACTCGTTGC GCTCTTTTCT CGTTTCGTCA GATTCAAACG 360
 TTTTCACTTC GCCAAGCCAT TTTTCTTTGT GTTTACTTTT TATTTTGACG TTTTAGACAT 420
 10 AAAAAAAGAG ACCTCACGGT CTCAACTTGG CCTGGGCA 458

(2) INFORMATION FOR SEQ ID NO: 1220:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 494 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1220:

CAAAATTTAT TTCTTGTAAG GTACAATATA AGTTAAATGT TGTTGTTAGG ATTGATTCTT 60
 25 TCAICTGAGC ATTAAATTGT AAGTCGCTAT ATTAAATTG TTCAGTATTT AmAAATAAAT 120
 TGAAAAATTC AACTGATAAT AAAGGTGTTC TAATCATACA AATACTTGAC GGTTTCGTAAA 180
 TAGTGTTTCAT TTGTAAGCAC CTCACATATT TGAATAGACA AATAGAGCCC TTTCAGGCTC 240
 30 TATTTGCTGT AATCTTAACA GCAGAAGCTA TTAAAACTAC CAGTCTTAGC ACAACCAGGA 300
 GTACATAAAC TATGACTTGT AATACGTTCTG TCACCTGCTG AATCATTGTA GTnATTGTTT 360
 GCTTTAACTT GCACGTCTAA ATCAAGAACT TTTTCCATAG ATAAAACCTC CTATTATTAG 420
 35 TTGAAGTTAA GGCCTACTTC AATTGTCATA TTATCCCTTT TCACACAACA AATCAATAAA 480
 TTATATAATT ATAT 494

(2) INFORMATION FOR SEQ ID NO: 1221:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 148 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1221:

ACTATTATTT TAATAGTGAC GACAGTTTTA ATTTTATTAA GTATTGCTTT AATTACCTTT 60
 ATGCAATACT ATTTACACA AGAnACCGAA AATGCCATAA GAGAAGATGC TAGACGTATA 120
 55 AGTTCACCTGG TCGAACAATC ACATAATA 148

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 401 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1222:

TCGCTTTTAC ATCAAATAAA TTATCTTTAT ACAATTTTCGT ATGAATTACT TCTTTATAAT 60
 TATAAAAATG AGGAATTTTT TGATTGTTTA ATTCACTTGC TAATTGATTA GCTTTTTGTT 120
 GGTCTTTAAT TGTAACGTCG TGTGGTGCAG TATATTTTAT TTCACTTGAT AAGGACGCTC 180
 TACTTATAGC AGCAAAGCAA AGAACTGAAA CAGTAATCGC TGAAATGATT GCCATGACCG 240
 TAAGTGAAAA AGCATTTTTC TTAATACGAT ACATAATAGA TGATGAGAAC ATGACATCAT 300
 TLACACTTAT AACACCTTtT CTAAActTCT TCACCATTTT AAAAActAGA GArACAGAGC 360
 TTTTAAAAAA TAAGnGTGCC CCAATCACAG TTGACAAnAA A 401

(2) INFORMATION FOR SEQ ID NO: 1223:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 176 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1223:

CTTGACCAAA TCCATTTTTT AACAAAAGTG GTCAAGTGAA ATCCCATCTT TCCAAATCAA 60
 AAAAGAGCTA AAGCAAAATG CTCTAGCCCT TGaTATTACT GATTTCCTAT CATTGTnTAG 120
 CGTATTAATA TTGCTTCATG TACTGATCTC TTTCCCATTC AGAGACTTGA GTTCTG 176

(2) INFORMATION FOR SEQ ID NO: 1224:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 283 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1224:

AATACTTTTA CGATAATTAT AAAGGTTTCAT TCAAATCTTA GGGCAAAATG TATAATATTT 60
 TTATGCAAAT TTAAAACAnT AACACTTATT TCAAGGTTCA ATATTTTGAG AATAAGGAGT 120

AATGCCAATC AAACCTCGCTC GAAATAGGGG GAAACGAGGC nATCATTTTT GACAATGAGT 240
 5 GTCAATAGGG AAGAATAACA ATTAGGAATG ACTCATAGGA GGA 283

(2) INFORMATION FOR SEQ ID NO: 1225:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 217 base pairs
 10 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1225:

AAAAGAAGAG AAGAAAGTTG AAGAACCTCA AGCACCTAAA GTTGATAACC AACAAGAGGT 60
 TAAAACTACG GCTGGTAAAG CTGAAGAAAC AACACAACCA GTTGCACAAC CATTAGTAAA 120
 20 ATTCCACAGG CCATTACAGG AATTTAAGTC GGATACCACG TGAATnACGT CAGGATGTCh 180
 GCCGTTTACA TGACACGCTC TACATATTCA CCACTCG 217

25 (2) INFORMATION FOR SEQ ID NO: 1226:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 176 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 30 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1226:

35 TGGGTACTAT TTATTACGTA AAACCTTTTCG TTAGCGATGC CGGCATTGCA AGAGCAAGGT 60
 TTACAAAAGC GGACTAGGTT TGCACCTTTCT GCTGTTCCAT CGCATATGGA TTAGTAAGGT 120
 40 CTTTATGGGn ACTGTAAGTG ATCCGAGCAA TGTCGGATAA TCTAGGTCTT GGATAG 176

(2) INFORMATION FOR SEQ ID NO: 1227:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 45 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1227:

AATGAAAATA AAGAAGATGA TTTTGTGCA TATGGGTCTC CAGAACATAA TTATCAATTT 60
 GGTGGAAGTT TAATCAAAAG TAAAAATTTA AGCACGTTAT TAAAACCAGT ACATCAAACC 120
 55

GCGGCCGTTT TAATTTTGTT TTCAAGTTAA TCATACTTAC ATATAAAAAT GAAAAGTTGA 240
 ATTTTITAGTA CAATTTCCAC TGTATTTATC TGTTAACCAC TTTATACCCG CAATATTTTCG 300
 5 TTGATCTTAT ATAAACACTT TTGGCTGCTT TTCCTTGACC TAGATTAAAA TTATAGATTT 360
 TCCTTGTAAG AGTGTGTTTG TAGTATCATA AATATGTAAA 400

(2) INFORMATION FOR SEQ ID NO: 1228:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 150 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1228:

20 ATCTAGCATG CTTTTGAAA ACGATAAGAA TTTGGTGTIT GAATTTTCATA ACCAACACCA 60
 GCAGTTTCAA CAACTACGTG TGTAGGATAT AAATGTGTTA CTTGACCTTT GACATACGCG 120
 25 TACATTATAG GCACATCCTT ACATACTCAn 150

(2) INFORMATION FOR SEQ ID NO: 1229:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 138 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 30 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1229:

35 TCGGTACAGT GCATTTGGTG CGTCATGGTT TACAAGGnAA AAATAAGTGA TCACTATTTA 60
 TCAGTATGGG AAAAAGCAAC GACGTATCAA ATGTACCATG GCTTAGCATT ATTAATTATA 120
 40 GGTGTAATTA GTGGTACA 138

(2) INFORMATION FOR SEQ ID NO: 1230:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 182 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 45 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1230:

50 TTGGTATGTA CCTCCAATAG TAATTTCAAT AACTTTGTCT GTTGAACACT AAGAGCAATT 60
 55

CCTTGATTAT nCTAAGAAAA GTAAAAGCAC ACGGAGTATC CTATCAGAAA ACCAGTATAC 180
CA 182

(2) INFORMATION FOR SEQ ID NO: 1231:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 233 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1231:

TCTCTTTAAA TTGTACACAA TTCTGGATAA CTATCCCCAT TTCTGTGGAT AAACACCTTG 60
ATGTCTTATT ACTTATCCTC GTTTTTATAT CCCATATTTA TCAACGGkTA TCGCTTTTTT 120
TCATAAAAAA aCACTACCGT ACCyCTTATT TAAGAAATAC AGTAGTATTA TTTTCAATAT 180
ATTTTAGCTA GChTTTCTAC GTCGTACAGT CGCGATTAAA CCTATACCTG CTA 233

(2) INFORMATION FOR SEQ ID NO: 1232:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 385 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1232:

GTTTTTGGA AAAGTACTAA TATTAaCCAA GTATTGAGTC ATATGTTAAA ACAAGATGCG 60
AATGATATTG GCTTTGCTAA ATTACTACAA AATGAGAATA ATCGTATGAG TTATAACGAG 120
TTAATGAGTG AATGGCAATC ACATCAACGT GCATTTTTAG AAGAGTTGAG GCATGTTGAA 180
ATGTTAAAAG AAGAATCTAT TAGAGCATAT GATGTTTATA AAAATTGTGA GTCTTTCTCT 240
AAGATTGAAC AGGTTATTAA TAGTGAAAAA ACAAGTATTG AAGAACAGGT ATATCATTTA 300
GATAATGAAA CGTTACGAGA CAATAAAGAA ATAGAAGTTT GGGATAATCG ATTTAATTAn 360
ATTGnTAGCC CAATGGnCCC TTAA 385

(2) INFORMATION FOR SEQ ID NO: 1233:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 180 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1233:

CTGAAAAGAT TCAACTAATC TGAGTCAGGT TACAATCTCA TGATAACCGC TCGCACCTCG 60
 5 GAGAAAGACG CTCAAACAGT ACAGAGCTCG ACCGCAGGAT ATTTTTTGTG AAAATGAACG 120
 TATGAGCTGT TCAGAnGGCA CTTTATTGCG CAATAAAACG GTAAAAATCC TGAAGTGAAG 180

(2) INFORMATION FOR SEQ ID NO: 1234:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 453 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1234:

ACCATTTTAA TTTnChTTAT GACCTTGTAT GCCATTATCA aCAGTTATGA TTAATGTTAT 60
 GCyTTCATCA TGAGCATTTC TAAATGCTAG TTCGTTTGGT CCATATCTTC GGTAAAGCGG 120
 TTAGGAATAT GCCATCCTAC TTGTGCACCT AAAAGTTGTA ATGTTATCAC TAAAATTGTA 180
 25 GTTGCGGTAA CACCGTCGGC ATCGTAATCA CCATAAACTA GGATTTTCTC ATCATTCGCT 240
 ATCGCTCTTT TAATTCTTTC AATAGTCTTA GTCATATCGC TCAATTGnAG TGCATCATGA 300
 30 TTGATATCTG TATCTGAAAT GATGGATTCT ATTGCTTGTh CATCAATAAT CGATTTACTT 360
 nCTAATATTT TTTTACGAT TGGCGTTAAC TTTAATTTTG ATGTTAATTC ATCACTTATG 420
 TATTCAGCTG GTTTAGTTAA TTTCCACTTA TAC 453

(2) INFORMATION FOR SEQ ID NO: 1235:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 163 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 40 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1235:

CGTGATTAAG TTGGATACTA AAATTTGGGA TGTTAGAGAA TGTGATGAAG ATTTnCAGCA 60
 ATGTCCTGAA ATTAATGAAA TAAGAGACAT TGTTTTAAAG CGGTGGTTTG ATAGGTTTAC 120
 50 CAACTGAAGC AGTTTATGGA CTTGCAGCGA ATGCGGCAGA TGA 163

(2) INFORMATION FOR SEQ ID NO: 1236:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 144 base pairs

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1236:

GTAAACACAT CGCTTATAAC GTGTAAATAT AAACACTGTT TTATAAAAAC TTTTATACC 60
10 ATTACCGGCA CCGATAAATG TGTACTATGG AGCACAACAA TAACTGGAAT ACTTnGATTT 120
AATCCCGCTA TAACATTTCC TAAT 144

(2) INFORMATION FOR SEQ ID NO: 1237:

15

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 204 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1237:

25 ATAGTTTAAG GTGATATTCA AACAAATATTA GGTITGATTT AACTATCAAG CATCTACTTT 60
GTCATGTTTA ATACCAGCAA ATAATAAAAT CCATGTCACG ATAATAAATG GCATGTTAAT 120
GCAGGGTAAG CCCAACCGGT CCAGCCATGG TGGTGGTACC CTAnTTGGCC nCCACCTACC 180
30 GGTTAATTAA CCACCCCCAA AAAA 204

(2) INFORMATION FOR SEQ ID NO: 1238:

35

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 157 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1238:

CGGTCATTTT GGTTATTnAA CAACTATACC TGAGGGGTGG TGGGTAATTC GTATTGCCGA 60
45 TTCAGTTTTG TTAATATGCT GACCACCTGC ACCAGAAGCT CTGAATGTAT CAACTGTGAA 120
TAGCATCCGG ATTGGTTTCA ATCTGCTATG GCATCAT 157

(2) INFORMATION FOR SEQ ID NO: 1239:

50

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 164 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1239:

5 TTAAAGCATG TTCATAAATG TTTGCATCAT CATGCACGTT CTGGACCGAG CCTTCAnCAC 60
 AAGGTAATTT GTACAGCATA CCGGCTCTAA CTCTTCGTTG CGTATGCCTG CAATTTCTTA 120
 CCTCGATACT TAAGTCAATT TTCCGGGCAT AAGGGTGTTT ATTT 164

10 (2) INFORMATION FOR SEQ ID NO: 1240:

(i) SEQUENCE CHARACTERISTICS:

- 15 (A) LENGTH: 239 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1240:

20 TTGAAAACT GAAAACGGTG AAGTTTACAA AACAACTAAA ACAGATAAAG ATGGTAAATA 60
 TCAATTTACT GGATTAGAAA ATGGAACTTA TAAAGTTGAA TTGAAACACC ATCAGTTACA 120
 25 CACCACACAA GTAGTTCAGA ACTATAAGTT GATCAATGTC TCACACAGTG CATAATnGAA 180
 CAACATGCCG GTCTCAACAC TCACTAGGCA GAGGATCATA ACGGTCGTnG TAAGCTCGG 239

(2) INFORMATION FOR SEQ ID NO: 1241:

30 (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 152 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1241:

40 TGATAAATAA TAGCGCCATC ATAAGTTGCA GGGTGGTAAT CATAATTTCT ACCATGAGTC 60
 TTTGCCTTGA AAGACCGTGC ACCACTTTCT TTAAATCGG TAAACGATAA TGnCAAGTTT 120
 AAAATAATTT GGCCTGTTGG CATTTGAGTA TC 152

45 (2) INFORMATION FOR SEQ ID NO: 1242:

(i) SEQUENCE CHARACTERISTICS:

- 50 (A) LENGTH: 148 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1242:

ATCTTTACCT TTCACTGTTC ACTTATGTAC CATAATACTT CTGACAGTTA CTAATTAACA 120
 GCAACTCTAA CTCATTTATA TTAACTA 148

(2) INFORMATION FOR SEQ ID NO: 1243:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 588 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1243:

GGTACCAATC GATCGTTACA AACGTTTCGT TAAAGACGAT AAAAAAGTAC CAACAGGCAA 60
 TGAATATCGT GAATTAGTAT TAAAGCAAT TCACATGATT ATGCTTGGTT TCTTGTATAA 120
 ATATATTGTT GCTTACTTTA TTAACACATA TGCAATCATG CCGTTACAAT TAGACTTACA 180
 TGGCTTTGTC AATTTGTGGT TATATATGTA CGCATACAGC TTATATTTAT TCTTTGACTT 240
 TGCAGGTTAT AGTTTATTTG CGATAGCATT TAGTTATTTA TTCGGTATTA AAACACCACC 300
 AAACCTTCGAT AAACCTTTCA AAGCGAAAAA TATTAAAGAT TTCTGGAATA GATGGCATAT 360
 GACATTATCA TTCTGGTTCA GAGATTGTAT TTACATGAGA TCTTTATTCT ACATGTCTCG 420
 TAAAAAATTA TTGAAGAGTC AATTTGCAAT GTCCAACGTG GCATTCTTAA TCAACTTCTT 480
 CATAATGGGG ATTTGGGCAT GGGAACGAAG TGTAATACCA TTGGTTTAAG GGGTTAAACC 540
 ATGGCCAGCC TTGGTTAAAG GGTAnGGnCC AATAAGGACG GTGGGCGG 588

(2) INFORMATION FOR SEQ ID NO: 1244:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 376 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1244:

ATTGCTGGAG AAAGGCAAGG CTTTGCAGGC GGATTGAACT CGACATTCAC TAGTATGGGT 60
 AATTTTCATAG GTCCTTTAAT CGCAGGTGCG TTATTTGATG TACACATTGA AGCACCAATT 120
 TATATGGCTA TAGGTGTTTC ATTAGCAGGT GTTGTTATTG TTTTAATTGA AAAGCAACAT 180
 AGAGCAAAAT TGAAAGAACA AAATATGTAG CATAAGTATT TTGGTGTATA TTGATATAAA 240
 GTAAAGCGTA ATATTATGAA TGATTAGCAT CGTTTTTCTT ATGAATTTTA TTAAGAAAAT 300

GTTATATGTn ACAAAA

376

(2) INFORMATION FOR SEQ ID NO: 1245:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 288 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1245:

CAATTTGTTT TAAAGCAAAT TCTTTACATT TCTCACGGAA TTCAGCTGTT GACATTTTCT 60
 TTCGGTCAAC ACCTTTTTTTC GTTAATGGCT TGTTC AATTG GGTAAACCAT GTGGTTATCC 120
 CCCAACCTGG GTACCGTATG GGGTGGCCAT TAGGAAACCC CTTGGCAATA GGTTTTTTAA 180
 TAAACCGGTA nCAAATTAAGGTCCTTTT TTAATAAATT TTTGGTTTCC AAAGGGGCCA 240
 ATGGnTCCCC CAATTAATGG TTAAGGTTT TAACCCCAAT TTTCCGGC 288

(2) INFORMATION FOR SEQ ID NO: 1246:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 161 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1246:

CATCATCAAT AGAACGGTAT TCGCAACGTC GTAGAAATCC CTTAAACGAC GAGAACAAAG 60
 CAAGTCGACA TCAGTAAAC ATTAAGATA TTATGGCTGA AGCAGAGAAC TTAATAACTT 120
 TTTATAAATC TATACnTCC AAAATGTAAA ACTACCAAAA T 161

(2) INFORMATION FOR SEQ ID NO: 1247:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 421 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1247:

TCACTACGTT GTTTAATTGT GGTAATTGCA GTTTTACAGG CTTGTCTAGT GAAGATTTAA 60
 AACTTAATTC AAGTGTTTTA GTCATGAATA TGTCTCTCTG ATTAAATTGA TAAAGATTTG 120

TTAATTTGGT CGTTTGATGC ATCAGGGTTA ATGTTAGCGA ATCGACGCTT AAATTCTGTT 240
 TGTTTGCCGT TAGCGTctAC TTTAGTAAAT GaTAATACAA TAGTGATGTG GTTTATTTtA 300
 5 CTCATATTTT AAAACCTCCT TTCACACTAT ATATCGAAAC AAAATAATAA AATGGCTAAT 360
 TTTATTTTCT ATGTTTAAAA TCTATAAAAn AGGCAATAGA TATGTGTAAC TAAAATATAN 420
 10 G 421

(2) INFORMATION FOR SEQ ID NO: 1248:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 409 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1248:

ATAAGCTGCT GTTGATAATC CAAGTGCTAA AGTTAAATAT AATATAGTGC CAAAAATTTT 60
 ATTCTTCTAT AAAACACCT CTCATATTT AATCCATATC TCTTTTTCGT TATTTATACA 120
 25 GAATTTTCTG AAAATAGTCA AGGTTAATTT ATTTGCTGCA AATTTCAACC ACTTTATGTT 180
 AAATGGACAT CAAAGTATAA TTGTATTATT ATTAAATTGT GCAGTGTATA AATAGACGAT 240
 30 ATGCAGGAAC ATGTCGCCTA TTGAGCCCGT TAAAAAGACG GTGACTAAAT GAGATTTTCT 300
 TTAACCATCA TTCGTTGTCA AAGTTTGGAA ATgATGGTTG TTTTTTATTG TTTAAATTAA 360
 TCATTGCGAC TTCTATATCA ATGAAAGTTA TCTTAATATA TGAAC TTCA 409

(2) INFORMATION FOR SEQ ID NO: 1249:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 217 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1249:

CTTTCAATTA CGAACAAATC ATTACTAGTT TATTTAATGA TAATGACTGn AATTTAGCAA 60
 AAAACGTAAC ATGATCATTT AGCTTGAATT GGTAAACTG TTTATCCAAC ATTTCCAGAC 120
 50 CAAATCACAC CGGTAAAACG TCAAAATATA TTGTnTCTAT GCCCGTTTTT ACCAGTTATC 180
 TCATTGCAGG TATATTGATG AATTCACAAG TTGGTAT 217

(2) INFORMATION FOR SEQ ID NO: 1250:

- (A) LENGTH: 176 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1250:

10 CAGAACGTGC GGATCGTTTT TATGCAACCT AAACCAGGTA CGGATTTAGC GTGGTTAAGT 60
 GGCAGTGCAC TAAGTATATT CATTGATCCT GCATTTACAC GATGAAAGCA TTTATTGCAT 120
 GAGTGGGTAG ATGCATTTTG CTGGAATGAT TCACAAATGC ATTAGAGnAC ATTTAC 176

15

(2) INFORMATION FOR SEQ ID NO: 1251:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 212 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1251:

25

TTTCAACTTT CTAAATTATA ATATATCTTT TTAATAAAG CTAGAATTTT TATATAATAA 60
 ATGTTAATAA CGAAAAGGGA TGATGCATAG TGATCGCAAG CACGCCAGAG GCCGATTTGA 120
 30 TATTGCGAGT TAGTTTATAT GGTTCGGGAT GATATGGATA GAATTGGTAA ACATCTCCTA 180
 AAGCATGGTA TAGTGCAATT nAAAAanCTGT GT 212

(2) INFORMATION FOR SEQ ID NO: 1252:

35

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 131 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1252:

45 CAGTAAGTCA ATTGAAATGG CTAATTTATT AAATCTATAA AAGCATAGAG CACTGTTGTG 60
 AGTTCATAAT CAAAGATTTA TAAATGTnTC AGACTGCCAA TATAACATTT AGGACCTAGA 120
 ACATTGATTA T 131

50

(2) INFORMATION FOR SEQ ID NO: 1253:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 462 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1253:

5 TTAGTAGTCA TCGGTATTGG TGGTTCTTAC TTAGGTGCAC GTGCAGCAAT CGAmATGTTA 60
 ACGTCATCAT TTAGAAACAG cAATGAATAC CCTGAmATTG TATTTGTTGG TAATCACTTA 120
 TCATCAACAT ATACGAAAGA GTTAGTTGAT TATTTAGCAG ACAAAGATTT CTCTGTAAAC 180
 10 GTTATTTCTA AATCTGGTAC AACTACAGAA CCAGCAGTTG CATTTAGATT GTTCAAACAA 240
 TTAGTTGAAG AAAGATACGG TAAAGAAGAA GCACAAAAAC GTATATTTGC AACACGGAT 300
 AAAGAAAAAG GnGCTTTAAA ACAGTTGGCT ACAAACGAAG GTTATGAAAC GTTTATCGTA 360
 15 CCTGATGATG TAGGTGGAAG ATATTCTGTT TTAACAGCAG TAGGATTATT ACCAATTGCA 420
 ACAGCTGGAA TTAACATCGA AGCTATGATG ATTGGTGCTG CA 462

(2) INFORMATION FOR SEQ ID NO: 1254:

20 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 25 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1254:

30 ACTCATAAGT GAATGGTTGA TTACCACTAG TTAAACTTC ATATACTATA GTTTCCTTTT 60
 TTATTTTGCA ATTAGTTATT TTCATTATAA ACTTCCTTTC AAACACTGCT GAAATAGACG 120
 TCTTTTTCAA ATAAGCATGA TTAATACTTC AATTCTTTAA TCCACATATA TTTAAAAGTG 180
 35 AGGTAGTAGG TAATAAATAT AAGACTTAAA GTTAAGATTG CTTTTTTCAT GTTTCATAAT 240
 TAAACCTCT GTAAATTTAA GGTTAGTATT ATGAAATAAT GGATTGGTTT ATTCTTTAGT 300
 ACTAACTTCG TAGTAAATTA TATAGTTCGC TAAATTGTAT TTATCTACTA TATTTTGGGA 360
 40 ATAAACAATT TCCTTTTCTT TCTTCAGTAA ATTATAAAAA 400

(2) INFORMATION FOR SEQ ID NO: 1255:

45 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 137 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 50 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1255:

55

nAATCTATGT ATGGGGGCAT CCAAAGATTT CATAGACTAC TTATTTGTTG ATGAAGCCGG 120
 ACAAGCAATC CTCAAGC 137

(2) INFORMATION FOR SEQ ID NO: 1256:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 139 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1256:

TGAAATGTAG AAATTGAATT AGAAATGAAG ATTA AAAATC nACACGTATC GTTCAAGTGG 60
 TGCAGGTGGT CAGCCGTAAA CACA ACTGAC TCTGCGTACG TATTACCATT TCCACTGGTG 120
 TCATTGCAAC ATCTTCTGA 139

(2) INFORMATION FOR SEQ ID NO: 1257:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 177 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1257:

TTACCA nTTA TTTTAACACC ATGTTTAGAC CAATTTGATC TGACTAAATT AATCGCTGTT 60
 TGTACCTCCA AATTGTTACA ACGTACACCT TTAGTTTTTC TAAATTAATG TATATTCATC 120
 ACATCTTCTT CAGTTAAGGG TCAAAGTATA ATTTGTCGAA ATTGTGAAGT CGTTGTA 177

(2) INFORMATION FOR SEQ ID NO: 1258:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 250 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1258:

AAGACCAACC GAAATGAATA TCGACATGGA TTAAGCCTAT ATTCAGATGT AAACGGCGAT 60
 TATATTAAAA AGCCAATTAC AGAATGTAGT GGTTAATGAA ATATGCCCAA GAATGGGCTG 120
 TATCACTTAG GTGTATCAAA CTGACCAAAA ATTGGAAGGA CTTTAGGCCA AAAACCATGC 180

TTAATTTTTC

250

(2) INFORMATION FOR SEQ ID NO: 1259:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 170 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1259:

ACATTTACGG GACATTTTAT TACATCACCC TGCTTTATTT TGGATTATGG CCTAATTTAT 60
 ACTGATAAAT CTAGGAGGTG GAAAAAAGAA TGCCCTGCAA TTTAATTnCA TTTAACCAAA 120
 TAATGAAACA ATAAAAACA TTATATCGTT ACTTATTAAG TAATTTGGCA 170

(2) INFORMATION FOR SEQ ID NO: 1260:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 313 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1260:

TTTGTAATCC GATACGTTGT ATTCAGGTTG ATGACACTAG GAATTTGTAA TGATCAATTT 60
 CTCTAATTCT TTACAATTGA TAGAATTCTT CGATTTGTGG ATAGACATTC ATATCATTGT 120
 CTAATGATTT TTGGTGATTC ATAAATTGTG ACTAAAGCTT GGATGCTTTA GGATTGTAGC 180
 TGAGACACAT GTTGCGTGAC TGnGGATTTA TCAnATAATC TCAATCACGT GATCCnATCA 240
 CATTATCAG CTCATAAAT CAAGATGATC GTCGTTTATG GGCGATTAAT GGCGTACCGC 300
 CAGTGTCCGC ACG 313

(2) INFORMATION FOR SEQ ID NO: 1261:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 206 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1261:

TAGCGATCAT TTAATCAAGG TTAGATTATT TAATGTCAGC ATTACGTTTG ACAATGAACT 60

GTTTGAGGTT ATCACAATGC CATTTAACAC TATGCGCACA TGGCTGAACT AATnAGCGAC 180
 GAGATGACTT CAAACCTTGA TTAGGT 206

(2) INFORMATION FOR SEQ ID NO: 1262:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 144 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1262:

AAGTGTGTAC ACGATAGCTA AACTCAAATA TCACAGAACA ACAAATGTCT TAGTACTTTG 60
 TGCCGGTGGT GGTACAAGTG GATTATTAGC CAATGCACTA ATAAAGCAGC TGAAGAATAT 120
 CATnTGCCAG TGAAAGCGGC ACTG 144

(2) INFORMATION FOR SEQ ID NO: 1263:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 132 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1263:

ATAACGACAC CTAATGCAAT TTGAATAAAG CAGTAGAATT TGTGGGAATC GATTATTGAT 60
 AACCGAATA ATAATCACAG CAAAATATA ATTAATAATG CTCTAATAGT GCCTACATnC 120
 TCCTCAAATT TT 132

(2) INFORMATION FOR SEQ ID NO: 1264:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 159 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1264:

TATGTCAATT TCGTAGAATn GGTTTTAnGC GCTATTTAGA ATAGCCATCA GATPAAAATCA 60
 TTATTTAAAC GTATAATAGG TCAAAATATA GAGAGTTACT ATACAAATTT CTAACTTTCA 120
 CTTAAAATAA AATATATATA ATTAAAGTGG AGGAGAAGG 159

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 132 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1265:

ATAGCTCAAG CAATCATTAT GTTTATAATG ATTGTATGGT TCTTTATAGA TGCTTTATTG 60
 ATTAATTAAT AAAAAGCTTA TTGCAAAATA TGTTTTTCGG TAACTGTAAT TTAGTGATTT 120
 TATCATTAAAC AG 132

(2) INFORMATION FOR SEQ ID NO: 1266:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 405 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1266:

CATGGATTTA TCTTAGCGAT TGGTCTAATT TIACCTTTAG GTGCACAAAA TGTATTTATT 60
 TTTAACCAAG GAGCTAATCA ACCAAAATAT AGATATGTAT TGCCTGCAAT AATTACAGCC 120
 GGGTTGTCAG ACAGCTTACT TATTATTATT GCAGTGGTAG GAGTWTCTAT CATTATTATG 180
 TCTTTACCTG TACTTCAwGC AwTTATTTAT ATAGTTGGTT TAATTTTCTT GATGTATATG 240
 GCTTGGACCA TTTGGCATGA TAAACCCTCA ACAGATGGAG AAACCTCAAAT TATGTCTCCA 300
 ATGAAACAAG TAAGTTTTGC TTTATCAGTT tCATTACTCA ATCCACATGC TATTTtAGAT 360
 ACAATTGGAr TAATTGGtAG TAGTGCTGCA TTATATAGTG GChGC 405

(2) INFORMATION FOR SEQ ID NO: 1267:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 125 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1267:

TCTTTATATT GCAGTACAAA ATTCGCGTGG AGGTTTAAACA CAAGTAGACC GCACAAGATT 60
 TAGCGTCTGA AGGTATTACT GTGTAATGCA TTCGCACCTG GntATCGTTC AAACACCAAT 120

(2) INFORMATION FOR SEQ ID NO: 1268:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 247 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1268:

TTTGCCCAAG TGACGTAAAG TACCCAATGT CCATTTGTAC TTGTATCGCC ATCAACAGTA 60
 ATCATATTAA ATGTATGGTC AGTCGAAGAT TTTAATAATT GATGAAGTGT ATTCGATTCA 120
 ATCGATGCAT CGTGTTATAA AAGCAAGCAT GTAGCCAATT GGAATCAAC CCGAnCTTGG 180
 CACACATGTA CGTTACACAT TAGAAnCAA GTGACCGACG GTAATCCTAC CCGCTCAACA 240
 CAAGCGC 247

(2) INFORMATION FOR SEQ ID NO: 1269:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 215 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1269:

TCATTGTATA TGAGCAGATT GGCTAGGCGG TGGCTGGACT GACGGAATCG ACACCCGGCT 60
 GGGGTTGGGA AAAGTACAAG ACGCAACATG CTATGATTTT CCTATGTGGT TATCGTCCGA 120
 TTTAAAGTGA GCAGCGCACG GTCAGTCATC TCTCACAGnA CCTAAAAAGA ACAGTAAGCh 180
 CAACCTAAAG CAGTGGAAct TAAATCATC AAGGT 215

(2) INFORMATION FOR SEQ ID NO: 1270:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 119 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1270:

ACAATAAAGA CTATTAAAAG AGATATAGGT TAGATATTAC ACTTTTAGAG CAAGACGGTA 60
 TAAATGCAAG TAAATTCGTG TATTTATCAA TACAGCAGGT nGAGTGAAAG GCCCAGCAG 119

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 223 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1271:

CGTGGCACGT TAAGCGTTTA ACCATAGCAT TAAGATGATT GTCTAGCAGA GGCGATTGTC 60
 GGGCTCACTA CAGTGCATGA TGAACCTAAT GCTTCAAATG TAACATTAAA AATAAAAGCA 120
 ACGATGTCAC TTCTTACTTC TACATCTGCC ATnTTCGTGA TTTCGTATCT ATCCCGCATC 180
 TCATCTTGAA CGTACGAGCC TAATCGCCCh GCGCGATCCT GCC 223

(2) INFORMATION FOR SEQ ID NO: 1272:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 120 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1272:

TAGTTACAAT ATCTGTCAAT TTCTGGAGAA CCACTAAAGC TATGCATAAT CCCGCCTACC 60
 TCTTCAGCAT GCTCCTCCAA TAAGATATCG GTACAGTCTT GAGnTGCTTC ACGGTTATGA 120

(2) INFORMATION FOR SEQ ID NO: 1273:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 126 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1273:

TTGCGCGGCA GTAAAATTCA AACTATTGGC GTCATTTTGC CTAGCTTAAC AAATCCGnTT 60
 TTCTCAGCAC TGATGCAAAG TATTCATGAC CATAAACCAT CTGATGTTGA TTTATGCTGG 120
 TTAACA 126

(2) INFORMATION FOR SEQ ID NO: 1274:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 131 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1274:

GATTCTGAAG GATCAATACn ACATGTACAA TTTTGGCGTA GGTGCAAAGG CATCAGGTTT 60
 5 GCTTGCTAAT CTACATCGAA GCGGCTACCT AAATTAATGA GAAATCACAC TCAGTTAATG 120
 CATGTACTAG C 131

(2) INFORMATION FOR SEQ ID NO: 1275:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 159 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1275:

TGGAGTATTA CCTCAAGTGA ATACAACATA CCTGTTGGAA GATTTTTCAA AACTTTAATT 60
 20 GGACCAAGTG ATGCCATTGA TGAGTTAAAT CCTAATAGAT TCAGGTTACC TCGGATGATT 120
 GATACTAATT TGGCCTGGCG CACGCTTTAG TAnTAGTGG 159

(2) INFORMATION FOR SEQ ID NO: 1276:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 577 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1276:

GAAGTAAATA ATATATAGAA TATAACAGGA AATAAAATAG ATAATATTAA TGTTGTTTTT 60
 TTACGCATTA TAACTTTAAA TTCGATTTTC AAGTAACTTA GTATCATAAT TAGATCCCCT 120
 40 TTGCTTTTTTA TTGnTGAAGT ATGAATCAAC AATTGAGACT tTTTGATTTT CAATATCATC 180
 CAAATTAATA TGAAGTTGTT GAAGATATAA AATCGTATCA TTTACATTTG AAGTAATAAT 240
 TTTsATAGTG CCATTATGAT TTTycTGAA TAACTAAATC ATCTTTATCT AGTTTTAACT 300
 45 TTCTTATATA TTCATCGGAT AACGTAATCT GAGATTGCTG ATTGGTTCTA ATATGTGACG 360
 TTGAATCATT AAGTATTATT TCTCCATTTT CAATGAGAAT AATTTTGTCT GACATACGTT 420
 CGACTTCTTC AATATAGTGC GATGTATAGA GTATCGTTCTG ATTATCTTCT TTTAAATTTT 480
 50 CAATAATTGA CCAAAAATAT TCTCTAATTT CTATATCCAT AGTCGATGTT GGTTTCATCTA 540

(2) INFORMATION FOR SEQ ID NO: 1277:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 131 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1277:

CTAAAnTAAG GTAATAGTTA CCAAGTACCA TATCTTGTGG ATGGTGTACT ACAGGTTTAC 60
 CATCTTTTAGG TTCAAGATGT TTTGATGACT GCTAACATCA ACATTCTTGC TTCAGCTTGT 120
 GCCTCTTTTG A 131

(2) INFORMATION FOR SEQ ID NO: 1278:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 166 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1278:

GTTTGCATA TTTTAGGCAG ACAACCTAAC TTTACAGAAA CAGGTATCTT TTCTGTTATG 60
 TGGAGTGAAC ATTGCTCTTA TAAACATTCT AAACCGTTTT TAAAGAATTT CCTACGCAGG 120
 TGCCATGGTT TGGGCTGGAG TCAGGTGCGT TGTGTATAGC TGATnA 166

(2) INFORMATION FOR SEQ ID NO: 1279:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 418 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1279:

CATAATTATG AAAATGATAT GATTTTTTATT AGACCATTTA AAAAAGCATA ATTTAAATCG 60
 AAGGCAGGAC ATTGAAATAT GAAATTTTCA ACTTTAAGTG AAGAAGAATT TACCAACTAC 120
 ACCAAAAAGC ACTTCAAACA TTATACGCAG TCTATAGAAT TATATAATTA TAGAAATAAA 180
 ATAAATCATG AAGCACATAT TGTGGGAGTG AAGAATGATA AAAATGAAGT TATAGCTGCA 240
 TGTTTATTAA CAGAGGCACG AATTTTTTAA TTCTACAAAT ATTTCTACTC TCATAGAGGT 300

ATTCATTTAT AAAAATAGAG GAGTATTTAT TCTTGTGAT CCATATnTAA TAGAGAAT

418

(2) INFORMATION FOR SEQ ID NO: 1280:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 449 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1280:

15	GACATATCAT AAATTACATG GTGATAAAAT TnTCGGCTAC GATACTAACG GATTCCCGAT	60
	TACCTGGTTT TATCCATTAG GTGAAAAGAA AGTTGAACGT AAGGCACCAA AATTAGAAAA	120
	ATAATTAAAT AAAACAGCTT AATGATGTAA TGAAATTAGT GAGTTAATCA CTGACTTCTA	180
20	CGTCATTGAG CTGTTTTTTT GTGCTTTGTT ACAAAGCATT ATTGAATTTA TTTTACGTGT	240
	TCATATTTTG AAACATCAAA GCCGTCTTGT TTAGCTTTGT TGATAATGTC TTTGATTGAA	300
	TGTAGTCCTT TATCGGCGAA GTATGATCTT AAGTTGTCTT TTGTAGCTTG GTCAGCATTC	360
25	TTATCTAATA ACACATCAAT ATAACCTAAT TCATGTTCTA AGAAGTTTGC ATCATCATGT	420
	AGTACGAGTC CATTTTGAGA ATAAACTTT	449

(2) INFORMATION FOR SEQ ID NO: 1281:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 289 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1281:

40	TATTTATATG TACTGATGAT GAAGTTTATT ATCTATCAAG TGGATCAAAT CCGAAATATA	60
	ATCAGTATAT GGGTGCATAT CATCTACAAT GGCATATGAT AAAATATGCA AAATCACATA	120
	ATATTAATAG GTATAATTTT TATGGAATAA CAGGCGTCTT TAGTAATGAG GCGGATGATT	180
45	TTGGTGTTCA ACAATTTAAA AAGGGTTTTA ATGCACATGT TGAAGAATTA ATTGGTGATT	240
	TCATCCAACC AGTAAAACCC ATTCCAATAT TAATnTGCCA AACCTnAAT	289

(2) INFORMATION FOR SEQ ID NO: 1282:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 402 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1282:

5 ATTCAGGTCG AGGTGGCCCG GCTCCATGCA CCGCGACGCA ACGGGGGAGG CAGACAAGGT 60
 ATAGGGCGGC GCCTACAATC CATGCCAACC CGTTCCATGT GCTCGCCGAG GCGGCATAAA 120
 TCGCCGTGAC GATCAGCGGT CCAATGATCG AAGTTAGGCT GGTAAGAGCC GCGAGCGATC 180
 10 CTTGAAGCTG TCCCTGATGG TCGTCATCTA CCTGCCTGGA CAGCATGGCC TGCAACGCGG 240
 GCATCCCGAT GCCGCCGGA GCGAGAAGAA CTAATTGATA CAACACTTTC TCAACCTGAT 300
 CTTCTTTACC TTCTACATAG CGCGTGAgCA GAACcATCTT GATGgCACAG CTAAATAATG 360
 15 CaATgGGAAT GATGTATGAC ATTCCGGGGTG CATAATTTCT CT 402

(2) INFORMATION FOR SEQ ID NO: 1283:

(i) SEQUENCE CHARACTERISTICS:

- 20 (A) LENGTH: 224 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1283:

TATTGACAAC CAGAGTACAA ACAGCAGCTA TATTATAGAC TTAGGTCTGA AGTGGTAGTG 60
 GCGGTGGACT ATTGTTGCGA CTGGACACCC GAGATATTGC TCAGCAhAGC ATCATATACA 120
 30 GGAAGTATTA AAAGAGACTT GnCGAGTAAC AAATACTGAA GTAATAAGAT TAAAAGAGTG 180
 AGGTGTATAA TTATCCTCGT TCTTTTATAT TAGTATGATA GAGA 224

(2) INFORMATION FOR SEQ ID NO: 1284:

(i) SEQUENCE CHARACTERISTICS:

- 40 (A) LENGTH: 146 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1284:

CGTGGGAGAT TGTGCATATT GATTATGCAA GGAAGnACGC CATAAAAGTG GATGGCCAGA 60
 CATCATTAAT ATTATTGATA CCACATCAGA AGGTATTCAA AGTGAATCGG TGATAAGTGA 120
 ATCAATTAAG TCTGCCAAAG AAAAGA 146

(2) INFORMATION FOR SEQ ID NO: 1285:

(A) LENGTH: 137 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1285:

10 ATTCGCGTG ACTGGACTTG GATCCGCAAC TTGGTAATTT AAGGAATTCT TGTCATTATA 60
 AGCCCTCCAT TTCATGATTT GATTTGCCAC TCGGTAACCA TTGGGGTTAC AGCTTCACTA 120
 GGGGAnATAC GAACCTC 137

15 (2) INFORMATION FOR SEQ ID NO: 1286:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 594 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1286:

25 GCTATTGATT ATGGTTAGCm TGTGTTCWC TTTACTCATT GTTCCTTGGt TAAGCTCrAA 60
 AAAAGCACGT ACTTTAAAGA AACATGCAGC TAATGAACAG GCCCGATTTT TAAATCATTT 120
 30 TTATGATTAT AAAGCTGGTA TGGATGAACT ACGTCGATTT AATCAAATTA ATCATTATCG 180
 AGATAATTTG ATGGCTAAAT TAAATCATTT TGATAAATTA CAACTTAAAG AGCAACGCTT 240
 TTTAACGATT TATGATTTTA TATTAAATAT TATTGCTATG CTTTCGATTT TTGGTAGTTT 300
 35 AGTTCTAGGA TTAATTCAAA TTAATGCAGG CCAACTAAAT ATTATTTATA TGACGAGTAT 360
 AGTTTTAATG GTCTTAACTT TATTTGAACA AGCTGTACCA ATGACAAATG TCGCGTATTA 420
 TAAAGCGGAT ACTGACCAAG CATTGCACGA TATTAATGAA GTGATATCTG TACCTTCTAC 480
 40 TAATGGAAAA AAACGTCTTA ATGATAAGTA TGATGCAACG AACATTTATG AAGTTAAGGA 540
 TGCTAGTTTT AAGTATTGGA ATCAGCAAAC GTATGTnTTG TCGGATATtn ATTT 594

45 (2) INFORMATION FOR SEQ ID NO: 1287:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 233 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1287:

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TGAAGTAGTA ATAAACCCGG AACCCCTAAAA CTGGATGGAG GATGAAACCA AAAAGGAACC 120
 AGCCAAGCCA AATTGGGGAA ACCAGGACGG CCCAATGGAG GTCCAACCAA TCCAAACCCC 180
 ATTCCGCTAA TGnCTATGGG TCCAATTAG GAATCCAATG GATGGATGGA TTh 233

(2) INFORMATION FOR SEQ ID NO: 1288:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 132 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1288:

AATCCCTGTA CGTTCGTAA GCTAGCTGGn TAATAAAAAA GAGTCTGGAA AGTAGGCAAC 60
 AATCAATGAC AATGAGCAGA TCCAATCGCA GTATGCTTAC TCGTGTAAGA AACGCAAACA 120
 TGGTGCGTCA CG 132

(2) INFORMATION FOR SEQ ID NO: 1289:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 154 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1289:

TATCTGATAA TTCTGTACCC AGGCGTTTTA ATATGTTTAT CTGGTGTCAT GATACATAAA 60
 CATTGTACCT TTAGGTCATA CGATGTCGCA AATAACTGCT CTTGCCGTTA CAACACCATT 120
 ACGGTTATAC ACTThTAGCC AATCATTATC TGGG 154

(2) INFORMATION FOR SEQ ID NO: 1290:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 145 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1290:

AAAAGTGGCA CATGCGGCTG TAAAGTCCTC TGTTTCTGAT AAATCATAAC CTATATACAT 60
 GTCTACCTTC CAACTCATCT AAGAAATAAG TCATATTTTT TTGAATGTTG GATAATCAAT 120

(2) INFORMATION FOR SEQ ID NO: 1291:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 360 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1291:

CTTAATGCTA TATATTCTTT GTTTTTGATA CCATTTTCATC GTCTTCTCTT GATTTCCTAAA 60
 CAATTTAGAA AATAAAAGAA TATACGCTTC AGACTTATTA AAACCCGCTA TATCATCTTG 120
 ATATTGTATT AACCAATTGAG TAAAGCTGTG TATTAAGTCA TCTTTCTTCG ATGCAATGGT 180
 AGTTAATGAT TTTACACGAT AAGCATATTT ATCTGTAAAT AACTTAGCAA CTACCCACC 240
 TAAATCATGT CCTAGAATAT GTGCCTCATG AATATTTAAC TTCTCCATTA GAATTTTAA 300
 ATCCTCAACG TGATCGTTTA AATCGTATGA TTCACTTTTA GAAGACTTGC CATGACCTCT 360

(2) INFORMATION FOR SEQ ID NO: 1292:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 164 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1292:

TGTGTTAGTT GTTTATGTTG TTGATATATA CTGCTCGTGC ACATGGTACC CAGACGATTC 60
 AACGnTGAGT ACACAAAATA CAAATCTAC GGCACATGGT ACCGTTTATA AAAGATGTGG 120
 AACCTTACTA GCATTTGTTG AGAACGCTAC ACGTTTAAAT CAAG 164

(2) INFORMATION FOR SEQ ID NO: 1293:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 132 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1293:

TTAATTTTCT ATATATTTCT TAGGTTATAT TGGTATCTAT GCCAGTAAGT GACATGACGT 60
 TAGATCATTG AATCCAAGAT CGAnACATTG GGACATATTT ATTAACGACA TGGCTTCAAC 120

(2) INFORMATION FOR SEQ ID NO: 1294:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 213 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1294:

GTCATGChTA ACAGGTGAAT ACCTAGTAAT TCAGATATTA TCATTTATAT ACCCTCTTAT 60
 ATTTTAGTGC ATTATCTCGA AATCGAGATA CTTAATGTAA ATTTTAGTG CAGCCTACAC 120
 TTCGTGATTG GGCAnTAGTT CTAAACGCT GTGGTAAGAT GTTAATTCAT CCTTGGTTAA 180
 CACACAAACG CTTGGTTAAT GCTCAGCAGC TAG 213

(2) INFORMATION FOR SEQ ID NO: 1295:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 163 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1295:

AAGAAGTTTG AAGTCTATGA AAACAATCAA AAATTGCCAG TGAGACTTGT ATCATATAGT 60
 CCTGTACCAG AAGACCATGC CTATATTCGA TTCCAGTTT CAGATGGCAC ACAGATGAAA 120
 TGTTTCTCGn CCAATGAGAG GGAGAACATA GTATCAATAG ATG 163

(2) INFORMATION FOR SEQ ID NO: 1296:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 207 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1296:

TAGCTTTAAT ACATTCTGAT TTTTAAACGC TTCGAAATGT TTTAGTAAC TAATTTTGCC 60
 ATAATCCCAA AAACCTCTTG ATTATTAAC GCnTTTGTAT TGGCTACATT AAGGCTTTAT 120
 ACACATCAGC TCACCATGCC CATATCTACT AATGGTTATA TCCCTAGAGT CCCAGCGATA 180
 TAACATCAAC GCTTACnGGA GTTTCAG 207

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 145 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1297:

ATGGCATCGG TTGGTTATGA AAAGnCAAGC CATGGGGAGG CCATATTTGG GGTGGAATCA 60
 TACCTGGAAC CTTTGGTGCC TACCACCAAT TGGTAACGGT TTTACCATCG GATTTT TAGT 120
 GATACAGCGA TATGTTTTGT ACAGG 145

(2) INFORMATION FOR SEQ ID NO: 1298:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 139 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1298:

TCCAAAAGTT AAAGGTCAAT TGAAACAGAn AAAGCTTATT ATGTCTGGAA AAGTATTAAA 60
 AGTAATGGTA TCAAATGACA TTGAACGTAA TCATTTTGAT AAGGCATGTA ATGAAGTCTT 120
 TCAAGCGTTG AATTGTGGT 139

(2) INFORMATION FOR SEQ ID NO: 1299:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 399 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1299:

GATATTGGCA ACCTTCAGCC GATGACCTCA TGGCAAATGA TTGGGAAGTT ATAAACCCAA 60
 CTAGAGACCA GGAATTATTG AAGCAATTAT AGAAATGCTA TCAATGATAC TTTTAAATT 120
 GTTTTTAAAC TCATTTTCAA AGTAAACAAC AGTCTTGTCT GAAATTGTTA CATGATAAAT 180
 AGTGTTACTA GCATACACGC CGTTTAGGAA CCCAGAGTTT TTAAGTTTAT TTAAATCGTA 240
 TTTTACATCT TCGAAATGTA GTTTTTGAAA ATACTTTGTA TGTATATCTT TAGCACTTCC 300
 AAAATTTATT GGCAGGTTAA TTTAATCGAA CCTAACTTTA CACATTCTAA ATAATCTTTG 360

(2) INFORMATION FOR SEQ ID NO: 1300:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 693 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1300:

CTACAGTGCA ATTTAACCAT GAAGTTGTTG ATTTTGAACA ATTATCAAAT GGTCAATGGG 60
 AAGTTACTGT TAAAAATCGC CTAAGTGGTG AGAAATTCAA ACAAGTAACT GACTACGTAT 120
 TCATCGGTGC TGGCGGTGGA GCAATTCCAT TATTACAAAA AACAGGTATC CCTGAAAGTA 180
 AACATTTGGG TGGATTCCCT ATCAGTGGTC AATTCTTAGC TTGTACAAAC CCaCAAGTTA 240
 TTGAACAACA CGATGCCAAA GTTTATGGTA AAGAGCCACC TGGTACACCA CCAATGACTG 300
 TACCTCATTT AGATACGCGT TACATTGATG GTCAAAGAAC ATTATTATTT GGACCATTTG 360
 CTAATGTTGG ACCTAAATTC TTGAAAAATG GTTCTAACTT AGATTTATTC AAGTCTGTTA 420
 AAACATACAA CATTACAAC TTAGTAGCAG CAGCAGTnAA AACTTACCT TTAATTAAAT 480
 ACTCATTTGA CCAAGTAATT ATGACAAAAG AAGGTTGTAT GAACCACTTA CGTACTTTCT 540
 ATCCAGAAGC ACGTAATGAA GATTGGCAAT TATACACTGC TGGTAAACGT GTACAAGTTA 600
 TCAAAGATAC ACCTGAACAC GGTAAGGAT TCATCCAATT CGGTACAGAA GTGGTTAACT 660
 CACAAGACCA CACTGnAATT GCATTATTAG GTG 693

(2) INFORMATION FOR SEQ ID NO: 1301:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 471 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1301:

CATACTTGGG TAATGCTGCC CATGGnACGC TGGnACAAGG TAAAGTTGCA CGTTTAATTT 60
 GTGnATGTAT ATAAAACAGA TGGGAACACC ATTTGAAGGG GATCCTCGTG CAAACTTAAA 120
 ACGTGTATTA AAAGAAATGG AAGATTTAGG cTTCACAGAC TTTAACCTAG GACCTGAACC 180
 AGAATTCTTC TTGTTTAAGT TGGATGAAAA AGGGGAACCA ACTTTAGAAC TTAATGATGA 240
 TGGTGGATAT TTCGATTTAG CACCTACAGA TTTAGGTGAA AACTGTCGTC GTGATATTGT 300

TCAACATGAA AtTGACTTaa ATATGCAGAT GCTGTTACAG CATGTGATAA TATCCAAACA 420
 TTTAAATTGG TTGTTAAAC AATCGCACGT AAACATAATT TACACGCAAC A 471

(2) INFORMATION FOR SEQ ID NO: 1302:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1302:

CATGTGATTA AGAACGTTCA CTGATGAATT TTTGATGATC GTTCGGTTTT TGTGGATT 60
 TTAATGATTA TTTATACAAA AACAGCCGTA TTTCAAGCCG TACATTTTAA ATTTAACTAA 120
 ATTTGCATCT AGTTAATAAT TGCATTTATC AAATTTGTCT TATTGATCCA ATCTAATTTG 180
 TACTCACAAA CTAGTTTAA ATTCTAACTT TATCTCTCAG TTCGTTATCA ATCATCAGAC 240
 ATAAACCAAT GAAGCAATCA GAAACACTC TAATTTTCTa TTAGAAATTT GnTTTAATAT 300
 AAAAAACAG GCTTACTTCA TATAATTTAT GAAATAAACC CGTCAATTTT TGTTTAATAT 360
 GCTTGGTGAT CnTTATTCT GCGTAATAAT GCTAAACCTG 400

(2) INFORMATION FOR SEQ ID NO: 1303:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 128 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1303:

AAAAGCTTAG TTGAACTTTC AACGTATCTT AGCTACTGAA GGTGCAGAAG TTTTAGAAGC 60
 AAAAGACTGG GGTAACCTnC GCCTAGCTTA TGAAATCAAT GGATTTCAAA GATGGGCTCT 120
 ACAACATC 128

(2) INFORMATION FOR SEQ ID NO: 1304:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 141 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

TCCTTCGGAT TCTAAATGGC ATTGGACAGT GTTTACAAGC TCGCATTCTTCT CCACTTTTTG 60
 CAATTTCTTT TACAATTTCT AAAGCTTCAT CAAAGTTTCC TTCAATAGnA AACGATTTCT 120
 5 GCACCATACA TTACTGACTT G 141

(2) INFORMATION FOR SEQ ID NO: 1305:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 162 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1305:

GA CTGGTAAA CACTAAGTGA ATTAGCTGGA CAATGAAAAA TATCCACAAT CATTAAATTAA 60
 20 CGTACGCGTA ACAGATAATA TCGGTTGAAG AAATGTTGAC GTTAAGAGTT ATGACTAAnt 120
 AGAGTAGAAT GATGGTGAGG TCGATTTTAG TAGACTCTGG AC 162

(2) INFORMATION FOR SEQ ID NO: 1306:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 282 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1306:

TTCTTAGTTG CTCGAACTAA TAATTTGCTT AATAATGATs TAGCTGTTAT TGTGTCATAT 60
 TCTAAAGGTG CCATAAATTT AAAA ACTATA GTAGTTGTTT TAAATTTAGT TGTGGTGAA 120
 ACTTTGATAT GTATATTTGG TTGAGATTGT CTA CTCAAAT ATATAGCCTC CTCTATATCT 180
 40 TCTTACATCT ATATTTTTCT AGTGATTTTA AATTGAACTA AGCTATTTTT CATATAATTT 240
 AATGAATACA AAATAGGTTT ATCTGATTCA TTATAGTGCG TA 282

(2) INFORMATION FOR SEQ ID NO: 1307:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1307:

AAGGAAAAAA CCCTTGGCCT TTGGAAAAAA CCCAAAAGGA AAGGGGTTTA AAAAAAAAAA 120
 AAGTTTAACC CGGTTGGCCC CAATTCCTCGC CCGGGGAACC CAAAAGGAnT TTTAAAAAAG 180
 5 GAAACCCAAT TCCCGGCCGG AAAAGGGTTT TTAAGCCCAA CCGGATTTTA AGGAAAACCA 240
 TTTTAAGATT ACCTGGGAAA AAAAACCGTT TAGGAA 276

(2) INFORMATION FOR SEQ ID NO: 1308:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 692 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1308:

20 TGTATTTAAT GCTCGTACAC ACAATTACAA AACTGCAAGA GAAAAAGCAT TGAGTAATAA 60
 TCATATTCCA GAAAATGTAT ATGACAATCT AGTAAAACT GTACATAAAT ATTTACCATT 120
 GCTACATAGA TATACTGAAT TGCGCAAAGA ATTGCTAGGT TTAGATGACT TGAAAATGTA 180
 25 TGATTTATAT ACACCATTAA TTAAAGATAT TAAGTTTGAA ATGCCTTATG AAGAAGCTAA 240
 AGAGTGGATG TTAAAAGCAT TAGAACCAAT GGGTGAAGAA TATTTAAATG TAGTTAAAGA 300
 AGGCTTArAC AATCGTTGGG TCGATGTCTA TGAGaATAAA GGTAAACGTT CAGGTGGCTA 360
 30 TTCATCAGGT GCACATTTAA CTAATCCATT TATTCTACTT AACTGGTCTA ATACTATTTT 420
 AGACTTATAC ACATTAGTTC ATGAATTTGG GCaTTCaGCA CATAGTTAcT TCaGTAGAAa 480
 ATTCCaACCg TCaAATTCTa GTGACTACaC TATTTTTGTC GcTGAAGtTG CaTCAACTTG 540
 35 TAACGAAGCA CTTTTAAGTG ATTATATGGA TAAACATCTT GATGATGAAA AACGCTTATT 600
 ATTATTAAAC CAAGAATTAG AnCGTTTCAG AGCTACATTA TTCCGACAAA CAATGTTTCGC 660
 40 AGAATTTGAG CATAAnATTc ATGCAATTGA AG 692

(2) INFORMATION FOR SEQ ID NO: 1309:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 151 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1309:

GGACTATTCG ATGATAGCTT TTTTGACTGG ATTTACTAAA ATGAAAGCAA GTACTATATA 60

atCGAGTAAT ATCTATATAT GACATTTTAA A

151

(2) INFORMATION FOR SEQ ID NO: 1310:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 115 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1310:

TGTGCATTTG ATAATATTCA CTATGATTCTG TGGTCATTCA CATCGTCTAC GCTCACCGGT 60
 CTAAACGTAC CTAACCCAAC ATGTAATGAA CAAATGCGAT ATTAnCACCT TTATT 115

(2) INFORMATION FOR SEQ ID NO: 1311:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 164 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1311:

CACCCAACTG ACCTCAATGG TATAATGCAT TTGTGAATAC CGAATATCAT TGGAATATCT 60
 CCTATCATAG GAATATAATA TGTATATATC TTCGTAATCn TGTTCAATTTT TAAGAAAATC 120
 AATAGAAGTG TATCGATTAA AACTACATTT GAACCATTAC TTTG 164

(2) INFORMATION FOR SEQ ID NO: 1312:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 141 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1312:

GAGGAAAATC GAAGTGAAAT TATTAAAATA TGGCGATGGT GGAATACGAA TAGATGGTGG 60
 TTTAATAGGC GGCTTTATTC GGGTGTTATT GTATGTAAAG TGAAAAATTT AAnCCCATTT 120
 CAAATTGGTG ATATCGTTGC G 141

(2) INFORMATION FOR SEQ ID NO: 1313:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 133 base pairs

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1313:

AATTGGTATT ATGCATAGTG CAATGGATGC TGGTATTAAA nTCCAGAGGA TTACAATTAT 60
TAGTTTCAAT AATCACGATT AGTTGAGATG GTTAGCCACA ACTTTCTAGT GTATCACCAT 120
TATATGTATC GGT 133

(2) INFORMATION FOR SEQ ID NO: 1314:

15

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 629 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1314:

TTGCAATTAG AATGCTGTTT CACCCCTTTA AACCATACTA TATATTTAAA TTTAGAGTCC 60
CATTTACACC AGGTTTAATA CCGAAAAGAC GCGAAGAAAT TGCAACTAAA ATTGGCCAAG 120
TGATTGAAGA GCATTTGCTT ACAGAAACTT TAATTAATGA AAAATTGAAA AGCGAGCAAT 180
CACAGCAAGC AATAGAATCT ATGATTCAAC AGCAGTTACA AAAGTTGACG AAAGATCAAT 240
TGTCAATAAAA ACAAATTACT TCTCAAATCG tATTGATTTA GAACAAGTAT TACaAACTAA 300
TGGAAATCAA TATATTGAAT CACAATTgAA TAATTATTAT aCAAAGCaTC AAAACCAAAC 360
AATAGCATCT TTATTGCCAA ATCAACTTGT AACATTTTTA AATCAGCATG TAGATAACGC 420
AACAGACTTA TTATGTGATC GTGCAAGGAA TTATTTATCA TCTGCAAAAG GCACACAAGA 480
TATTAATGAT ATGTTGGATA CTTTTTTCAA TGAGAAAGGT AAGTTAATTG GTATGTTGCA 540
AATGTTTATG ACAAAGAGA GTATTGCAGA TCGCATTCAA CAAGAACTTA TACGTTTAAC 600
ATCTCATCCT AAAGCAAGAA CAATTGTGA 629

45

(2) INFORMATION FOR SEQ ID NO: 1315:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 399 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1315:

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	ATACAGGTAC GTTCGTTATC AATGGTGCAG AACGTGTAAT CGTATCTCAA TTAGTTCGTT	120
	CACCATCCGT TTATTTCAAT GAAAAAATCG AAAAAATGG TCGTGAAAAC TATGATGCAA	180
5	CAATTATTCC AAACCGTGGT GCATGGTTAG AATATGAAAC AGATGCTAAA GATGTTGTAT	240
	ACGTACGTAT TGATAGAACA CGTAAACTAC CATTACAGT ATTGTTACGT GCATTAGGGT	300
	TCTCAAGCGA CCCAAGAAAT TGnTGACCTT TAAGGGGACC AATGGAATAT nTACCGTAAT	360
10	ACCTTTAGGA GGAAAGACCG GCACCTGAAA CCACTGGAA	399

(2) INFORMATION FOR SEQ ID NO: 1316:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 778 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1316:

	ATAAACATTT TAAnATGTAA TThAGAAATT TTTTtagTAC AAAATCTTTC TTAATAATGA	60
25	TTAAGGAGGT CAGTAATGAT TGAAATTAAA ACATTAACGA ATAATGATTT TAATGAGTAT	120
	AAGAGACTTG TTTCGACAGT CAATGAAGAA TTCACTCAAG ATTCACATTA TAGTCAAACA	180
	ATGACTgACA CCTTAATACA TGACATTTTA AATCAAGGTT CACCGAAATG TATTGTATTT	240
30	GGCTGTTATG AAAACGAAAC ACTTATCGCA ACAGCTGCCT TAGAACAAAT TCGATACGTT	300
	GGAAAAGAAC ATAAATCATT AATTAAATAC AACTTTGTTA CTAATAACGA TAAATCGATT	360
35	AATAGCGAGC TCATTAATTT CATTATTAAT TATGCACGGC AGAACAATTA CGAATCTTTA	420
	CTTACATCAA TTGTGTCAA CAACATAGnn GCTAAAGTTT TCTATAGTGC ACTAGGATTC	480
	GACATTCTTG GTTTTGAGAA AAATGCAATT AAAATCGGAA ATACCTATTT CGATGAACAT	540
40	TGGCTTTTTT ATGATTTGAT TAATAAGTAA TACAGTTTTA TATATTCTAC rTTTCTCATA	600
	AATTCAAATC ATATAGGTTT TATTTTTCAT ACAACTACTC TACTATTGAG TAGTTGTTTT	660
	TTATTTGATA TGATAACAAT AAGTTTTTTT CAGAATATTC TATGTTTTAG GGGTGTCAAA	720
45	ACTTAATGGG TAACCGCAAT TATTCATGGA nTTATCnTAA GCGATTGGGT CCTAAnTT	778

(2) INFORMATION FOR SEQ ID NO: 1317:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 465 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1317:

5 TGCACAAGGT GGTGCAGCAA TTGCAGCGTT CTTTATTATT AAACAAAATA AGAAGTTAAA 60
 AGGTGTGGCA TCTGCCGCAG TATTTTCAGC ATTACTTGGT ATTACAGAAC CGGCTATGTT 120
 TGGTGTTACT TAAAACTAAG ATATCCATTT ATTGGCGCTA TCGTTGGATC AGGTATTGGT 180
 10 TCAGCATATA TTGCTTTCTT CAAGGTTAAA GCAATCGCAT TAGGAACTGC TGGATTGCCA 240
 GgATTtATTT CAATCAATCC AGTACATGCA GGaTGGTTAC ACTaCTTTGT TGGTATGACA 300
 ATATCATTcA TCATTGcTAT AACAGTTACT TTAAtTTTAT CtAAaAGAAa AGCAAATAAA 360
 15 GAAGTTGTAG AATAAAAAAA GAGGTATGAC AGTAATCAAA GTATCAGTCA TTGCAAATGC 420
 AATAGGATGA AACTTTAAGC TGTCATACCT TThAATTTAG TTATA 465

(2) INFORMATION FOR SEQ ID NO: 1318:

- 20 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 150 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 25 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1318:

30 GACTTAATAT AACTGATCTT TTGCTATTAT TGAAACATAT TTATAAAGAA AATAGCATTG 60
 CATAATACCC AAGCAATAAA TACTATAATA TTTTGAAGT AACTAATCAA ACATCTAAGA 120
 CATGATTGAT AnCACCACAG AAAAATAAGA 150

(2) INFORMATION FOR SEQ ID NO: 1319:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 131 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 40 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1319:

45 CCACCTTTTA ACGTACGTAT CCATGAATCA TATGATTAAT TTAATATCAT TATTACTTAT 60
 TTCTTATCTT TATThTCTTT TTTCTTCTG AAAAGTAGTA ATGAACCTAT TGATGCTAAT 120
 AATCCCCAAA T 131

(2) INFORMATION FOR SEQ ID NO: 1320:

- 50 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 140 base pairs

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1320:

TAGTGTCCAA ATGAAAGTGT GGCTACCTAT AGCTGGTCCA TGAAGCTTTA TTTTAACTG 60
 10 GTTTGTACAA TATTAAATA TCAAAATCTT CTCGCGnTTT GGACAGTTTT TTTGGTATTA 120
 ACCATTAATA AACGGAAAGA 140

(2) INFORMATION FOR SEQ ID NO: 1321:

15

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 140 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1321:

25 CTTATTATAT AATTCTAATC CTAGTACATT ATACATTTTA TCAAATAGTC AACTGGATAA 60
 CTTTGAAAGT GAATGATnCT TTTAAATAA AGAAGATAAT ATAAAGTGCT TGATAATGGA 120
 TTTGTAGTTG ATGATTTAAA 140

30

(2) INFORMATION FOR SEQ ID NO: 1322:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 185 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1322:

40 TCGTTGCAAC ACAGGCACTA TTTTACCTTT ATATGTTGTA ATAGTTTGAT TGCTGCCATT 60
 TAAACAACCA CCTTTCTTAC TCCACAAATT TACCATGAAT AGCGCGCGCG CCATAGCGGG 120
 45 ATACTAAAGT GTTCTGCACC TTGCCTGTCT CCTTCAAnTT TCGATTACTG TAGAGCACAA 180
 GTACG 185

(2) INFORMATION FOR SEQ ID NO: 1323:

50

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 148 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1323:

5 ACCTGCAATT TTCGTTATTC AAAACAATAA CTATGCAATT TCAACACCAC GGAGCAAGCA 60
 AACTGCTGCT GAAACATTAG CTCAAAAAGC AATTGCTGTA GGTATTCCTG GGTATCCCAA 120
 GTTGGTGGTA TGGTGCGGTA nTTGGTTT 148

(2) INFORMATION FOR SEQ ID NO: 1324:

(i) SEQUENCE CHARACTERISTICS:

- 15 (A) LENGTH: 141 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1324:

20 GAAAGCATTG ATGGACAAAG ATGAACCACC AAATGAATGG CGATTAGATT CCAATTGATA 60
 TGGCTCACGG AAAATTTATG CTACAATTGC GTCCAGTAAA CAGTGGCACT AATAGTCCAC 120
 25 TTAnGCTCCC TAGTGGATGA A 141

(2) INFORMATION FOR SEQ ID NO: 1325:

(i) SEQUENCE CHARACTERISTICS:

- 30 (A) LENGTH: 204 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1325:

35 TTATACTATC GTGAAGGGTT TATTACTCAA TTAATGCCTA AAAAGGATAA AAGTTATTTA 60
 40 GTTATTGATA ATTTTAATCG TATAGATACA GACATTTTCC AAACGTATAT TAATGTGTTA 120
 GAAGGCTATG AAGTAACATT ACCACGTTAT AATAAGACG GTAATATGAT TAAATGGTCA 180
 CGACAAAAAG ATTCTTTCTA TTAT 204

(2) INFORMATION FOR SEQ ID NO: 1326:

(i) SEQUENCE CHARACTERISTICS:

- 50 (A) LENGTH: 147 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1326:

55

TTTGTAAAA GTCTTCATTT CGGATGAAGC TTTATCTATT GAACGCTCCA AATTATTTAA 120

AGCAGCTTTT TCTTTATTAA CAGCTGT 147

(2) INFORMATION FOR SEQ ID NO: 1327:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 530 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1327:

CATTnAATGA AGAAACTGAA CCCnGAACTA TACGACGCAG AAGGCAATTT AATTAATAAT 60

AGTAAAACAT CCAGCTTAAT CCATTGATGT GTTATAAAAG TGAAAAGCTC CAATCAAAGT 120

TGACGCTCAA ATAGTTTAAC TTTGATCGGA GCTTTTTTAT AATGTATACC GAAAGGTTCA 180

AATATTATAT AATGGTAGAA TTGAAAGAGA ATATAAAAAA GTGAGGATAT AAAATGAAAG 240

TTAATCCTAA TAATATAGAA TTAATCATTG GTGCAGTAAA AGAAGAACAA TATCCAGAAA 300

CAGAATTGTC TGAAGTGCAC TGAGCGGTCG ATCTAATGTA GGTAAGTCTA CATTTATCca 360

ATAGTATGAT TGGCAGAAAA AATATGGCAC GTACATCACA GCAACCCGGC AAAACGCAAA 420

CGTTAAATTT TTATAATATA GATGAACAAC TTATTTTTGT GGATGTTCCA GGGTATGGAT 480

ATGCTAAAGT AAGTAAACA CAACGTGAAA AATTTGGGAA AATGATTGAG 530

(2) INFORMATION FOR SEQ ID NO: 1328:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 153 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1328:

AAGAAAGTTT GATCTAGGCC AACCTTTCTA ACAACGATAC GACAGTTTAA TAATGTCTCA 60

TATCTTGA CT TCCCATGATG ATATGGTCGT TAATCACATC AATGACTTAA ATCTGGATnA 120

ATAGATGCGA ATGGATCTTG AAAAATCATT GTA 153

(2) INFORMATION FOR SEQ ID NO: 1329:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 115 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1329:

5 TGTAGTTCGT TTGTGCTCTA ATTAAACGGT CGAAACCATG GATTAGACCT GCGATTACAA 60
CTGCAATGAT ACCTGAAGCA TGAACCTCTT CTGnTAAAAA GTATACGACA AAAGG 115

(2) INFORMATION FOR SEQ ID NO: 1330:

10 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 112 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1330:

20 AACAGTTAT CTACATCTGC TGATAGGCAT ACTATTACTA ATAAATAATG CATCTTTTGG 60
CCAGATGTTT TCTTAATCAA TTGCACCAAC GAATGGCACT CTCATCTGTA Gn 112

(2) INFORMATION FOR SEQ ID NO: 1331:

25 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 203 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1331:

35 TTCATTGCAG ACAnTTGGTG AACCATGTGG ACGAACTAGT CCTAGATTAA GATAAGAGAT 60
TAGTGAnCAT TGCCACCACT GCAATTAAAC ATTCTTGGA AAATTAACCTT AAGTTAGAAT 120
CTTAATGCAT ACAGATACGG CGAAGATGAT GCCAAAGAAC GTCACGACTT TATGATGATG 180
ACTGAACCCA GTTTTTACGG AAG 203

40 (2) INFORMATION FOR SEQ ID NO: 1332:

45 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 269 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1332:

55 ATGATGTACT AATATCTAAT AAGCTTGCTA AGTCTTGAGA CCTCATTTTA ATCACCTTTT 60

GACTATCTAT TTCTGTTAGT ACGTTTGACA TATTAATCAC TCCaCyTTAA CGCAaTAWAw 180
 TTTAWTAGCG TTGGCTATTG TTGTTTAACG CGATGGnATT TACAACTTGT AACGTAAGAG 240
 5 AATGAAAAAT AAGCTGnATA TGTGTTTTG 269

(2) INFORMATION FOR SEQ ID NO: 1333:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 142 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1333:

TAGCTTTTGC CCAATATGGT GAATCATGCG CCGTTCTGTA ATAATCTTCA CTTGGCATTG 60
 20 TTGGAATTTG AACACATCC TGTTCATTTT TATAGAnTGC TTAAATGGTA CAGCTGAAAA 120
 ATCAAAGTAA TGTCTTTTTT TG 142

(2) INFORMATION FOR SEQ ID NO: 1334:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 211 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1334:

ACTGATGCCC AATATGCATC TTGnCAATTG CAGGTGTGCA TGAATAACA CATGACAAAT 60
 35 CTGCCTGACT TTTTGCTGAC CCATAAATAA TTGGnCTAAC TTTTTCATC TTGATCTTGC 120
 ATCCTTGCCT TCCTATTTAA AATGCTACAA ATAAATTTGC CGGCGAGTGA ATTTTAATGT 180
 40 TTTACAACGC TGTTCATAC CTGGGAATAA G 211

(2) INFORMATION FOR SEQ ID NO: 1335:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 129 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1335:

CTTGAATCTC TTGTGCCTCT GTGATGTATC ATCAAATTAT TTGCACTGCT TCTTCTTTTA 60

TCCGCTCGC

129

(2) INFORMATION FOR SEQ ID NO: 1336:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 633 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1336:

15	CATGATGGCh TCTTACCAA GGCgATTtTA AGAGCAATGA TACCAAGATA TTTTtAATAC	60
	TGATCAAAGT TCAGGTGGTA GCACAATTAC ACAACAACtT GTTAAAAATC AAGTTCTTAC	120
	CAACGAAAAA ACATATAGTA GAAAAGCAAA TGAATnCGCC TAGCAATTAG ATTAGAACAC	180
20	CTACTCTCAA AAGATGAAAT TATATATACA TATTtAAATA TAGTTCctTC GGTAGAGATT	240
	ATAATGGCGC TAATATTTCC GGAATTGCAT CCGCTTCATA TAGTCTATTT GGTATTCCAC	300
	CAAAAGATTT ATCAATTGCA CAATCTGCAT ACCTTATCGG TTTGTTGCAA AGCCCATATG	360
25	GCTATACACC CTACGAAAAA GATGGAACGT TAAAATCGGA TAAAGATTTG AAATATAGTA	420
	TTCAAAGACA ACATTATGTA TTAAAGCGTA TGTTAATCGA AGATCAAATC ACTGaAAAAG	480
	AATACAACGA CGCATTAAAA TATGATATTA AATCACATTT GTTAAATCGA AAAAAGCGTT	540
30	AATTGATGCT CACTTTTTTAA AGTAACCACA ACAATGAATC CAAATATTAA AAACAGCAGT	600
	AAGATTATTT TCAATTAGAA AATTTCTCAC TGC	633

(2) INFORMATION FOR SEQ ID NO: 1337:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 317 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1337:

45	ATCAATATTT AGCAGTTATC ATTATGCTTG AACGGGTGGT AAAGGCGGAG AAGTCATCCA	60
	CTTTTTCCTA TACTACAAGG ACCTTTACTT TAAAACAACG AATTtACAAA ATAAAAGGCA	120
	TAATTTCTTT TCTGTCACAT CGCTCATTCT AACTACTAGA CTTTtAAAAAT CGTTCCTGTA	180
50	ATTTAAACTC AATCAACTnT CAATTAATGA TGCATAATAT GATTATAAGT ATAGTAGTTA	240
	ACTTCAAATA TCTTAGAAAT GTCCTGTACT ATATCTCTTT TATTCTCAAA AGTCATAGGT	300

(2) INFORMATION FOR SEQ ID NO: 1338:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 125 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1338:

TACGGCATAT ACCTCGTTCA TCAATGTTTCG TAAACATTAT TTAAAACATC TCTTACATCT 60
 TCGGTTGGAA GTTCTTCATA GTCGAATTTC ATTGTnTTAT CAAAGTTTTTC CATTTGCGAC 120
 ACTCC 125

(2) INFORMATION FOR SEQ ID NO: 1339:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 111 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1339:

GAGCTTCGTT CCATTGTTAT CAAACGATTG CCATTCTGAA ATGCTGTAAA TAGCATGCTT 60
 CAAATCATCT TGTGCCTGCA GCAGTTTCTT TGnAATATGC TTCATATCAT T 111

(2) INFORMATION FOR SEQ ID NO: 1340:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 158 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1340:

TCACACGTTT AGTTTTCTAT GAATACCAAT ATTTTAACAC CATGTTTAGC CAATTTGTCT 60
 GCTAAATTAA TCGTGTTTGT CCTCCAAATT GACACGCACC TTTAGTTTTT CTAAATAATG 120
 ATATCATCAC ATCTCTCAGT TAAAGGTCAA AnATATTG 158

(2) INFORMATION FOR SEQ ID NO: 1341:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1341:

5 GCTTCAGGTC AATTAAAACG TTCAAGAGCT TTCACATCTC ACTTATTCGC AAACAAGAGC 60
 ACTAAACAAA AACGTCAATT ACGTAAAGCT AGATTAGTGT CTAAGAGCGA TATGAAACGT 120
 GTAAAACAAT TATTAGCATA CAAAAAATAA GAACAAATAC AGAAATCGGT AGGAATTACC 180
 10 TAAGGAGGAA TTTTTTATGC CACGAGTTAA AGGTGGAACA GTAACAAGAG CGCGTCGTAA 240
 AAAAACGATT AAATTAGCTA AAGGTTACTT CGGTTCAAAA CATAATTAT ACAAAGTAGC 300
 TAAGCAACAA GTAATGAAAT CAGGTCAATA TGCTTTCCGT GACCGTCGTC AACGTAAACG 360
 15 TGACTTCCGT AAATTATGGA TTACACGTAT CAACGCAGCA 400

(2) INFORMATION FOR SEQ ID NO: 1342:

(i) SEQUENCE CHARACTERISTICS:

- 20 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1342:

25 GTTGAACAAG GGCAACAAAA ATTTGAGCG AACAGATTT TTGAATGGTT ATATCAAAAA 60
 30 AGAGTAGATT CGATTGATGA AATGACGAAC TTATCGAAAG ACTTACGACA GCTTTTAAAA 120
 GATAACTTTA CTGTTACAAC TTTAACAAC GTAGTAAAAC AAGAAAGTAA AGACGGTACA 180
 ATTAAATTCT TATTTGAATT ACAAGATGGC TATACAATTG AAAGTGT TTTT AATGAGACAT 240
 35 GATTATGGAA ATTCAGTATG TGTAACGACA CAAGTAGGTT GTCGCATCGG ATGTACGTTT 300
 TGTGCTTCTA CACTGGCGG CTTAAAAAGA AACCTTGAAG CTGGCGAAAT TGTTTCACAA 360
 GTTTTAACAG TTCAAAAAGC CCTTGATGCT ACAGAAGAGC 400

(2) INFORMATION FOR SEQ ID NO: 1343:

(i) SEQUENCE CHARACTERISTICS:

- 45 (A) LENGTH: 399 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1343:

50 GAAAATTTCA TCAGGTGTTG GCgTGAACG TACATTCCCA TTACACACAC CAAAATTGA 60

TTTACGTGGT AAAGCTGCTA GAATCCAAGA AATTCGTTAA TCAGCATTTA AACAAAGCTA 180
 TGTATGAGTC AAATTCGACT CAAACAATAA AGCCATCTAG GTCACCTTTA TGGAGTGATA 240
 5 TAGATGGCTT TTTTGTCTGT TTAGTTAATG TAAAGTTGAT AATGTAATTG TTTATTCCTT 300
 CTCTATTCAT AACGTGTTTG CTCAAAATGG TTATATAAAC AAAAATCTAC TAAGTGCCAT 360
 TGAAAAGGAC TTAGTAGATT TATTAAATAT ATGCGTAnA 399

(2) INFORMATION FOR SEQ ID NO: 1344:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 134 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1344:

AACTTACAAC ACCAGGTAAT AACAGCAATA AAGGCACCAG TTAGTGCGGT AATGCCAnTA 60
 TCTAGGCCTT TAGGTTGCCA TAGTACGAGA TGTAGAGGTA CTAGAGGAAT GAGTGTCGCT 120
 25 AAAGTTGTCTG TCGT 134

(2) INFORMATION FOR SEQ ID NO: 1345:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 109 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1345:

TCATAATAAA CAAGTTCACA TGAATCACAA CATCTGAAGA CAATGTTCAA AATGAGGCTG 60
 40 GCACAATAGA TGATCGCAAG TCGnATCATC ACACAGTACT GAAGCAAGA 109

(2) INFORMATION FOR SEQ ID NO: 1346:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 113 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1346:

CCATATCTGG nACGACCGAC ACCTTTACCA CCAACGATTG GTGCCATTTG TTTGCATAAG 60

(2) INFORMATION FOR SEQ ID NO: 1347:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 124 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1347:

CAATTGAAAG GTGAATTTTA TAGGTCCATG ACAAATAAG GCTTGTTAAA GCTTATTAAAC 60
 ACAGTTTCAT CAAATAGTTA AATTAGTTTT TGTTTTGCAA TAAATTGGGT ATAGATTACA 120
 AnTG 124

(2) INFORMATION FOR SEQ ID NO: 1348:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 337 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1348:

CATCAGTGGC CTGATCACCC CAACATTTGA CATCAATGCA TACCAGTTGA TTTGAACAAT 60
 GATTGCATTG AGCTATCATC AAGTTTGTCT TTAAGCTACT AAACCCACGA ACCATGTTAA 120
 CCCCCTGGTC ACCATCACCA ATTGCTCGAT CTAATTCAGT TAATTCAGAT TCATGTTTTT 180
 TAAACGTTTC TTCTAAATTT AATAAACGTG CTTTCATATC ATcAtTTCAT TGTGCaCtaT 240
 AAaTgAtATAT TaTTCATATT CACTTCTnAT TTAAAGTATG ACTTGTTGTT GGTGCTAAAA 300
 ATGChTCCAA ATATTCTGGT TTATnAGGCA CGATAGT 337

(2) INFORMATION FOR SEQ ID NO: 1349:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 162 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1349:

CAGCACGTAA ATACAACAAA GCGATCCCCA GCTTGTTGGA CATCATTAAT ACCTGTAATT 60
 TCAACAGGCG TTGATGGACC AGCCGTTTTG ATTCTTTGAC CTAAGTCATT ACATGCCGAA 120

(2) INFORMATION FOR SEQ ID NO: 1350:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 399 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1350:

CAATTTTACT TTGAATTTCT TTTTATCTT TTCTAGTTTT ATCGTCCCAC TCTTCAATCC 60
 ATTTTTTAGC TTTATCTTCA TTATTAGTCA ACTTGCCTAT TTCTTTTAAT ATTcTTTATG 120
 ATTGTATTTA TTGTATGTAT ATGGGATTGT TGGCGCTATT TTTTGGTATT TTTTATATT 180
 TTTATCCATA GcATCTACAA CAATTAAATC TGGTTTTGcT TTAGCAACTC TTTCAACATC 240
 ATTTTCTCCA ATATAATCAA CCCCTTTTAA ATAAGGTTTT AAAATTGAAG AATCTTTAGT 300
 TATATCTGAA ACAGCAATTG GTTTGATTCC TAACTTTATA AAATCACCAA CATAAAATCC 360
 AGTTAATACA GCAACTCTTT TAAGGTTCTC nGGGACTTT 399

(2) INFORMATION FOR SEQ ID NO: 1351:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1351:

TAAAACTTAG GCGGTTTTGC ATGATTATAG CGCTCAACAC GTTTGAAATT ATAGGTCATC 60
 TCTGGTATTC TTGTACGATT CTTTTTCCAA TCTAAATCAA AGTTTTCAT TCTTCTTTT 120
 GAGTTTAGAC TTAATCGATC ACGTTCATGT TCTTTAAAAG ATGGAATAAC TTGTTTAAGT 180
 GACCCTTCCA TTCTTAATTG ACCATGTGAA AACCAAGCTA TGTAGTTACT CACTTGTGaA 240
 ATTTTATCAA TATCATCACC AATTGACACA ATCGTTAAAT TATTTTCAAT ATAATCATTT 300
 GTTAATTCAA TCGCACGTTT CATAAATTGT GGTGTTAAAT AGTCAATAAC ATGATTTAAA 360
 ATAATAATAT TTGATTTTGA TGAGCGTGCA ATACTTAATA 400

(2) INFORMATION FOR SEQ ID NO: 1352:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 117 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1352:

5 AAGGGAACAA AAGCTGGAGC TCCACCGCGG TGcGgCcGCT CTAGAACTAG TGGATCCCCC 60
GGGCTGCAGG AATTCGGCAC GAGCATATCT AGTATTTTAG GACGGAGGnA GTACATT 117

(2) INFORMATION FOR SEQ ID NO: 1353:

10 (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 153 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1353:

20 AGTTCAGGAG AGTTATAAAT ATTAGGGTGG TACATGCCCG AAATCATTGG AATTGTTAAA 60
GTAGATTTTA CAGTTTAGAG ATAACAGACA TGTCTATATG AAGGGCTGTC TACCCTCGTA 120
AGGTTATATC CTACAGnTGA ACGTATCAAG CTT 153

25 (2) INFORMATION FOR SEQ ID NO: 1354:

30 (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 159 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1354:

35 TGTTGTAACA GCTCTCTATG TTTACGTTGG AAGTATGGTT TATTTTTCAT CTTACATTT 60
AGTTCCTTAT TTAAAAGTGA TAGAGCAATT GCACTCGTAG GTCAAGAAGC GGGATGCCAA 120
CACAAAGTTC ACAAGAnAAT ACACTTTTGA AAATATTGG 159

40 (2) INFORMATION FOR SEQ ID NO: 1355:

45 (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 118 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1355:

CGnCTTCCTT CAACCATGTG AGAAGTTGTC TCATATACTT ACTACGGCTT GCTAATACTC 60

(2) INFORMATION FOR SEQ ID NO: 1356:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 110 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1356:

GGATTCATTG GTGCTTATTT ATTTACATTC AATAATGAGA nCTTTACACA ACCAATTGGT 60
 CAAATTATAG ATGTCAACAT GTTTCTTCGA CACCTACAAA AGATGCACAA 110

(2) INFORMATION FOR SEQ ID NO: 1357:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 133 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1357:

TAATGGTGGG GTATATTTAT ATTAGTACCG AATTTTAGGn GCCTCACTAT CATTTATCAA 60
 ATTATTTAAA GTGGGATCCT ATCGCAATCA ATTGGCAGGG GCAGAATAAT GGCATTAGTC 120
 GTTGAAGATA TCG 133

(2) INFORMATION FOR SEQ ID NO: 1358:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1358:

GTGTCGGTAA GTCCACTTTC TTAAATCATT ATCGTCCAGA ACTTAATCTT GAGACAAATG 60
 ATATATCAAA ATCATTAAAT CGAGGAAAGC ATACTACAAG ACATGTCGAA CTATTCGAAC 120
 GTCAAAACGG TTATATTGCA GACACACCTG GATTCAGTGC TTTAGATTTT GATCATATAG 180
 ATAAAGATGA AATAAAAGAT TATTTTCTTG AATTAAATCG ATATGGTGAA CATGTAAGTT 240
 TAGGAATTGT AATCATATCA AAGAACCTAA TTGTAATGTT AAGCATCAAT TAGAGATAGG 300
 GAATATTGCG CAATTTAGAT ACGACCATTA TTTACAACCTA TTAAATGAAA TTTCCAAATA 360

(2) INFORMATION FOR SEQ ID NO: 1359:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 392 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1359:

CTGTTTTAGT CTTATTGATT GCCTGACCAT TAACTAAGTA ATTTGTGTTT GAAGCGGTTA 60
ATTGAGCAAT GATTGGAATG TCGTATTTCT TTCTCGTTCG TGAAATGACA TTTGTAACT 120
CTTCTAGGTC GTAATACGTT TCGAAAAGTA GCGCGTCAAC GCCTTCTTCA ATTAAGGTGT 180
CTATTTGAAT TCAGTATGAT AAAGAATAGT TTGTAAGCTG ATATCCCCCT GTTTGGATAC 240
CTCTAAACCC CACCAACTGG GGCCCAATAT ATACGTAAAC TnTAATTGGC nGGCTTTTTT 300
GCGATGCGAC GGGGGGCTGG AGGATGCTTA ACCTTAACCT CCAGACCGAA CCGTTTAACC 360
TTTCCAAAAT TGCACCATAG GAATGGGTGG AT 392

(2) INFORMATION FOR SEQ ID NO: 1360:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 160 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1360:

CCATGGTTAT TTTCTTCACA TTTCATGTAT ATATATTTGT TTATTATCTG TCTCTACTAG 60
ACTGTAACT CCAACATATC TGTTTTATAA ACCAGAGAGC AGTCATTCAA TAAATAAACA 120
GATCTGAGGG CCAACTGGCA TGTTGTCAAC TTATGATATT 160

(2) INFORMATION FOR SEQ ID NO: 1361:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 148 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1361:

GTATCCTAAA GATTCAGTTA ATCGGAGCGT TGTATTGCAT GAAGGTACAT TGCGGAATGC 60

ATATTTATTC ACGATnTTAT TTAGCGAC

148

(2) INFORMATION FOR SEQ ID NO: 1362:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 147 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1362:

AAAATTACTA TGAAGATTGC ATTAGGATGC GACCATATTG TTACAGATAC AAAAATGCGT 60
 GSTATCTGAAT TTTTAAAATC AAAAGGACAT GAAGTCATTG ACTGACACTT CACTCATnAG 120
 TGGCGACAGT GTACGTATCA GACTTAG 147

(2) INFORMATION FOR SEQ ID NO: 1363:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 108 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1363:

CTGGCAAAGA AGACAACAAC AAGCTGGTAA AGAAGCAACA ACAAGCCTGG TAAAGAGACA 60
 ACAACAAnCT GGCAAAGAAG ACGGCAACAA GCTGGTAAAG AAGCAACA 108

(2) INFORMATION FOR SEQ ID NO: 1364:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 153 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1364:

GACAATGTTG CTGTAATGGG GAAGGnAATG GGTGGTACC GCGAATTGAA TAATTTAAAA 60
 CCGTAATATA TAATCGTAAT TGTTAAGCCC TCATTTTTAT AAATTTTGGA CCTCTTGAAA 120
 AAGTTACGTT TTCAAGAGGT TTTATTTTATC CTA 153

(2) INFORMATION FOR SEQ ID NO: 1365:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 184 base pairs

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1365:

TAAGAGAATT ATATGCATTC CAAACGAAAC nAACAGAAAA ACGGACCAAA CTAACGTGCA	60
CAAGTACAAT CGCTGTACTA CTGCAAAACA CGCAAAACGA ACACTTACGT ACACACAAAA	120
AGACCACCAT TCACGTCGGG ATTATTAAAA AGGTAGTCTC GTACATTTAT TAACTACTT	180
ACGT	184

15

(2) INFORMATION FOR SEQ ID NO: 1366:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 452 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1366:

25

ACATTAGATG GGTCAATCAT GTTATACACG GTGATTTAGG GGAGTCAATC AAATATAAAA	60
GGCCGGTAAT TGATGTTATT GAGGAAAGAA TTCCAAATAC AATATTACTC GGTGCTATGT	120
CATTAATTAT TACTTATATT ATCTCATTTG CTTTAGGAAT AACGTCAGGT AGATATTCTT	180
ACAGTTTGAC GGATTATACT GTGCAAATAT TTAATTATTT GATGTTAGCC ATTCCATCTT	240
TTATTGCGGG AGTATTTGCA ATTtTATTT TTTCTTTTGA ATTACAATGG TTCCCGTTTC	300
AAGGTTCTGT TGATATTAAC CTAAAGAAG GTACTTTTGA ATATtATATG AGTAAAATAT	360
ATCACACATT TTTACCTGCA TTCACTTTAG GTTTATTATC TACTGCTGGT TATAWTCAAT	420
ATTTACGTAA TGaTATTATT GAAAATTCTA AA	452

40

(2) INFORMATION FOR SEQ ID NO: 1367:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 141 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1367:

50

TTGTGAGTAA TTGGACAATA TAAGTGTGG TCTTGATGG CATATCCTTG GTACGACCTG	60
GGCAACTTGC TTCATAGCGC AGTTAGGAAC TGATCAATCA TTGGCGTTTT GATACCTAGC	120

55

(2) INFORMATION FOR SEQ ID NO: 1368:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 126 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1368:

TGGTGCAAAT TAAAACGGTT GCATATGCAC GTACGACGTA TTGCTAAATA CAATCAATTA 60
 TTACGTATCG AAGATGAATT ATTTGAAACG CTAAATATGA CGGTATCAAA TCATTCTATn 120
 ACTTAG 126

(2) INFORMATION FOR SEQ ID NO: 1369:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 160 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1369:

TGnAAAGTTC ATCAGGGAGC CATTTTTACA ACACAGGGCA CATACGGGTT GTGTTTAGGT 60
 GCAATTGCCC CAAGCGGACA AAGCATTATT TAAAGTTTCA AGTTCTTCAA CGATTTATTA 120
 GTGCACAGGA TCCTGTTAAG AGGTATTTTG AAGACTTCCG 160

(2) INFORMATION FOR SEQ ID NO: 1370:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1370:

AGTAATTCTG CAAATGCCGC AGATAGCnGT ACTTTGAATT ATGAGGTTTA CAAATACAAT 60
 ACCAATGACA CGTCAATTGC TAATGACTAT TTTAATAAAC CGGCAAAGTA CATTAGAAA 120
 AATGGTAAAT TGTATGTTCA AATAACTGTC AACCACAGTC ATTGGATTAC TGGAATGAGT 180
 ATCGAAGGAC ATAAAGAAAA TATTATTAGT AAAAACA CTG CCAAAGATGA ACGCACTTCT 240
 GAATTTGAAG TAAGTAAGTT GAACGGTAAA ATAGATGGAA AAATTGACGT TTATATCGAT 300

AATGGACCA~~n~~ CTGATGTAGC AGGTGCTAAT GCACCAGGTA

400

(2) INFORMATION FOR SEQ ID NO: 1371:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 345 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1371:

CATCAAGAAC ATGTGAGACC ACAATTTGAA TCACTTGAAA AAATAAATAA AGACATTGTT 60

GGATGGATAA AATTATCAGG AACATCATT AATTATCCAG TACTACAAGG TAAGACAAAT 120

CACGATTATT TAAATTTAGA TTTTGAGCGA GAACATCGAC GTAAAGGTAG TATTTT~~y~~ATG 180

GATTTTAGAA ATGAATTGAA GAATTT~~n~~AAT CATAATACTA TTTTATACGG GCACCATGTC 240

GGTGATAATA CGATGTTTGA TGTGTTAGAA GATTATTTAA AGCAATCGTT TTATGAAAAA 300

CACAAGATAA TTGA~~n~~TTTGG CAATAAATAT GGTAATCTCC ATTGC 345

(2) INFORMATION FOR SEQ ID NO: 1372:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 154 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1372:

TTGAAAAGCA GTTTGGATTT ATGCTCAAAC CATGGACGAC GGTTAGGTTT ATGAATGTTA 60

TTCCAAATAG GTTCATCTAT AAAA~~A~~CTAGT GGAAAGTGGA AAAA~~T~~nAGT GGACCTTCGA 120

TAATACGATG TATTTATCGT TAGAAGCAGT AATA 154

(2) INFORMATION FOR SEQ ID NO: 1373:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 136 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1373:

GAGCCTAATT ATTCAAGCCA AATCGCATAT GAAATTGATA AAGAAGTTCA ACGAATCGTT 60

CTATACnAGA ACTATC

136

(2) INFORMATION FOR SEQ ID NO: 1374:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 358 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1374:

ATCTTTAACA ATTAAACCA TACTATCTTG AATCATCATC AAATTTAACG CATGTGCGTC 60
 AAGTTGTTTC ACTTTAAAGA CTTCATTATT AAGACCGACC TTAGACTGCT TTTTAAAAAT 120
 AGGTACATTC GTAATCATAC CTATACTTTG ATTGTCTAAG TGTAATTTGT TTTGGTGATA 180
 TCGATTATAA TCTTGTGCAG TAAAAGCTGT AATCATTACT GATTGTCTTG AAAATATCGC 240
 GCCTTCATTA CCAATGAAGT CTATTGGaAT aTCATCACTA GCCTGTTTTA ACTTGTAATA 300
 AGCACGATTC TnTTCTAAAG AAGCTCTAAA TAATGTCGTT TCATATACTT TGAAGTCT 358

(2) INFORMATION FOR SEQ ID NO: 1375:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 122 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1375:

ATATTGTGTG CTAAATTTGC TTAAGTATGT TTTTGTGTTG nAAGTAAGCA TATGTTATTG 60
 TCTTTTAAAT TGTTGTAAAA GTGCTGTTTT CATAGAATTA ATATCAGACA TCTTTATTAG 120
 TA 122

(2) INFORMATION FOR SEQ ID NO: 1376:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 467 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1376:

CATTTTCTTC GGTTTCTGTC TTTTATGCG TAGATTATT TTCTTGTTCT TGGTTATTAC 60

CGATAATTAC GATGGTAATA AGAAGTTTTT TCAAATATAA CGCCTCCATG TTAATGAAAA 180
 GTAGTTGATA CGTGAAGCTA AATAATThAT TTCAATATTG CCATAATCAT TTTAAAAAAT 240
 5 AAATATTAGA AAAGTAGGCG ATATTAATAT TTTCAATTGTt TTTTGTGTAC TTCAATTAGT 300
 ATAACAAAAC TGTATGTAT TTATAAATAT AATCATTAGT ATTTTTATGG CTGAAAAAGT 360
 TATAATAAAA GTGTAAGGAA TAAATATTT GTATGGAAAA GAGAGATAAT TATGAATAAA 420
 10 ACCAGTAAAG TTTGTGTAGC AGCAACATTA GCATTGGGCA CACTGAT 467

(2) INFORMATION FOR SEQ ID NO: 1377:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 128 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1377:

AGGTGTTAGA ATTTATTTTA AGTGTTATAC GTGTCTTCCA GAAATTGTAA TGGCATTATA 60
 25 TTTAThAAAG TGTGGCAGG TTATTTTCAG GTGTATTAGT TTAGGTATCA TTCGTAGTAT 120
 GCTTGGGA 128

(2) INFORMATION FOR SEQ ID NO: 1378:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1378:

GGACGCTAGA GGATCCCGGT CTGGAAAATA TCGTCCAGAA CTTAGAAATA TGAAAATATT 60
 CCCAAGACCA ATCGATAATA TATTGCCAAT ATGGCGTGCT GTTGGTGGTC CACCTGCAAG 120
 TGCTATTAAA GCGGGAAAAC AAGGTGTGCC AATGATGATT ACAACCCTTG GTGGCCCAGC 180
 45 AATGAACTTT AAAGGTTCTA TAtATGCTTA TCGTCAAkCG GCAACTGAaG CAGGTTTCGA 240
 TGCTTCGCCT AAGTCTTTAC CAGTAAGTAC AGCGAGTCTG TTTTATACAG CTGAAACAAC 300
 TCAGGATGCT ATGAGAGAAT TTTATCCACA TTTGAATACA GGGATGTCAT TTATTCGTGG 360
 50 ThGTTGGTTA TCCGAAACAG CAAThGCTAA TTCGTCAGTT 400

(2) INFORMATION FOR SEQ ID NO: 1379:

- (A) LENGTH: 108 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1379:

10 AACTACAACA ATTTAACGAC CAACCTTAAA AnAATACGCT CTTATGCATT GGATTAGTCC 60
 TGATTATACA ATTTAACTGA ACAAATACCC ATCATTTAAA AGACTTAG 108

(2) INFORMATION FOR SEQ ID NO: 1380:

15

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 118 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1380:

25 AAGTGGGGGG AATCAGTATG TTACATTTAC ATATATTAAG TATTAGCGAT TATTTTATTT 60
 ATCGCTACAT ACTTAACCAT TTCAAAAATT CAAGGCGGnT CACCATTTTC CAACCCGT 118

(2) INFORMATION FOR SEQ ID NO: 1381:

30

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 114 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1381:

40 TCATGAAAAC ATTTATTTTA AAATTTGATA TTTGTTCAAT AATATTCGAA ATTAACThT 60
 GTGTATAGAT TTTCTTTATA TCCTGAGAGA CATGTACTAT AATGTTTGTG AATA 114

(2) INFORMATION FOR SEQ ID NO: 1382:

45

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 165 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1382:

55 CGGTATTGAT CATATAAATA GTGTTTAGAT GCTATAGTCG GnTGACTTAA GTAATTTAAA 60

55

GTTTTCTTCT GCCTTGCTTA AAGATATATG ACAGGGTGCT GGCAT

165

(2) INFORMATION FOR SEQ ID NO: 1383:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 111 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1383:

TTTGGTGTGA TGGAGTATAT TTAGGTGTGG AAATCAAGAG GGAATTCCAT TTTCAAACAT 60

CCAATTAGAG TCGnAATAAG AACTCGCTAT CGGTCCAATT AACTGATTCA G 111

(2) INFORMATION FOR SEQ ID NO: 1384:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 144 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1384:

CATTTAAATA ACGTTGTGAC CATGTGCTTT ATGCTATGTG CTAGAAAATC CATGTTTTTA 60

TCTAATTCT TAATAAATTG ACATTAAGTT GGATTCTTGT CnCTTCACG TTTCGACATT 120

GGATGACTGA ACGCATGAAA TCAG 144

(2) INFORMATION FOR SEQ ID NO: 1385:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 103 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1385:

TCGTTGTGCA GCAACTGCAT TACGCTGTCT CATTAAATGTA AGCGCAATGG CCATTGGTT 60

TTTCnATAGT GGAATACTTG TCAAAATTGA ACATTGTATC TTC 103

(2) INFORMATION FOR SEQ ID NO: 1386:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 533 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1386:

5 CCAGnACAAA TACAACGTTA TATTCAACAA TTAGAAGACT TAGnATAGAT ATAAATTGAG 60
 GGAGGACATC GATATGGCAT TTGAAGGGTT ATCAGAAACC TTGCAAGCGA CGATGCAAAA 120
 AATGCGTGGT AAGGGTAAAC TTAAGTGAAGC TGATATAAAG ATAATGATGC GTGAAGTAAG 180
 10 ATTAGCGTTA CTTGAGGCTG nACGTAAACT TTAAAGTGGT AAAAGAATTT ATTAACACAG 240
 TATCAGAACG CGCATTAGGT TCCGATGTAA TGCAATCATT AACACCAGGG CAACAAGTTA 300
 TTAAATAGT TCAAGATGAA TTAACGCAGT TGATGGGTGG AGAAAATACG TCGATTAAAnA 360
 15 TGTCAAATAA ACCACCTACT GTTGTATGA TGGTTGGTTT ACAAGGTGCT GGTAAACAA 420
 CAACTGCAGG TAAATTAGCA TTATTGATGC GTAAAAATA CAACAAnAAA CCTATGTnAG 480
 TTGCAGCAGA TATTTATCGT CCAGCAGCGA TAAATCAATT ACAAACAGTA GGG 533

(2) INFORMATION FOR SEQ ID NO: 1387:

(i) SEQUENCE CHARACTERISTICS:

- 25 (A) LENGTH: 112 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1387:

30 TTATTTACAA GCCATTAATA TATTTTAGGT TTGTTCTGCA TCGATTCATT GGTGCTATTT 60
 TATTTACATT CAATAATGAG ACTTTTACAn CAAACCAATT GGTCAAATAT AG 112

(2) INFORMATION FOR SEQ ID NO: 1388:

(i) SEQUENCE CHARACTERISTICS:

- 40 (A) LENGTH: 118 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1388:

45 ACACCTACAG TTAATAGTAT CAGTGCACAC TAAAGTCCTA ATACTTTCAA CCATGACTAA 60
 TGATGTATCn TCTTGCCCAA CGAACGCGTT GTGCCAAATT GAATTAGACT GGACGGAC 118

(2) INFORMATION FOR SEQ ID NO: 1389:

(i) SEQUENCE CHARACTERISTICS:

- 55 (A) LENGTH: 147 base pairs

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1389:

CGACGACACA ACTTTATAAT AAAATCTTAG ACAATAACGA AGGGTATTAA CAGAACTTGG 60
10 TGCTGTTAAT GCAAGTACTG GAAAATATAC TGGTCGTCGC TAAAGCAAAT TTTTGCTCTG 120
ACCTnCAATG GTACTTGTTG GGGAATA 147

(2) INFORMATION FOR SEQ ID NO: 1390:

15

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 161 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1390:

25 TTTTGTATCA TGATTTTGG GCATGGATCA ATCACTTGCT TGGCCAATGG TCTTCAACA 60
ATTTGGATAT CTGACCTTAT TCGCTTTATC TAGCACTTTT GnCAATTTGT TGGCATTGGA 120
AAACATGTGT TTAGATTTT GTATGCCTCT CGCAGGCTTT T 161

30

(2) INFORMATION FOR SEQ ID NO: 1391:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 102 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1391:

40 GCCGCACGCG CGCGATTCTC GGCCTAATAA GAAAACAAAT AATTCCAATT CATATATGnA 60
CATTTTTGCC TCCTTATTTT TTGAAAATGT GGAATTGGAA TT 102

45

(2) INFORMATION FOR SEQ ID NO: 1392:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 412 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1392:

55

AAAATGCTAT TAACAACGTA TTAAATAATC AAGATTACCA TGGTATTAAA GATAAACCAT 120
 TCGCATTATT CGTAACTGGA TTTTTCGACA ATGTAACAGA TAATACTGTT GGTATTAACT 180
 5 TTAAGACAAA AGACGGTTCA ATAGCAGTAT TTATGCGTCC AGATATTGGA GAAACATTTA 240
 GCGAGTTTAG AACATTCTTA GCCGTCTTGT TAATGTTGTT ATTATTTATC TCGATTTTCAT 300
 TAGTTATCGC ATCAACCTAT TCAATCATTC GTCCAGTAAA AAAGTTAAAG CTAGCGACCG 360
 10 AACGCTTAAT TGATGGTGAT TTTGAAACAC CTATCAAACA AACnCGCAAA GA 412

(2) INFORMATION FOR SEQ ID NO: 1393:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 186 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1393:

AGCAAnTGGa TTGCAATGAG TTTCTTATAT TTACAAGGTG GTAGATTGAT TGATGTTTTTA 60
 25 ACTGCGATAT TAGCAGTAGT CTAGATACCT AGTCACTGAG ATTTTAGATC GAGTTACACG 120
 CACATTATCC GATCTGTCTA TATGGATATC CGTATGACTA CCTATCCCAC GGACTGCACA 180
 TACTGG 186

(2) INFORMATION FOR SEQ ID NO: 1394:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 118 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1394:

TCTTTAAAAG AATCAGGAGC TTGGAAGAAG TATATCAGGA TCATTAAGTC AACAAATTAC 60
 GCGATATGAA AATTTGAATA ACAATTTGnA AAAGCATGCT TCCGATAATC AGCAAGCC 118

(2) INFORMATION FOR SEQ ID NO: 1395:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 175 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

GGTTACCTCG GATGGATGAT TACTATTTTG GGCTGGGCGC CGGCTTTnGT TATTAGTGGT 60
 GGCAATAGTG GCAAAGTGTC ACAAAAAAAT CCAATAGCTG GAAACCCGGG TATATTTGGG 120
 5 TATTAACGCC GGTGGCCGGG ATTTGGCCAA TCGCATTAAAT TTAATGGCCA TTGGG 175

(2) INFORMATION FOR SEQ ID NO: 1396:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 132 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1396:

AGAAACTTAG ACGATTAGTA TCATATATTA GAACACnCA CCGAACTGA AATCATGGCT 60
 20 GATATCGCAC CTTGAAGAAG CAAAAATGCC GCACGACTTG GCTTTGATAT ATTGGCACGA 120
 CTTACATGGC AT 132

(2) INFORMATION FOR SEQ ID NO: 1397:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 121 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1397:

AGAGGTCCGG CTATCTATCA AATAAAGTGG TCATTTAAAG CGTACACTTC GGGTGCGTTG 60
 35 ATTTCTTACT TTAGGTGTAG GACAATTGTA TCGCATCTAT CTTTACnCTA CCTGCATTGT 120
 T 121

(2) INFORMATION FOR SEQ ID NO: 1398:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 202 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1398:

CGTTCGTATA ATCTCACTTG CATCnTGAAT TGAACAACAT CCTGTCATTT TAAGACTGCT 60
 50 AAAnGTACAG CTGAAAACCA AGTAAGTCCG TTTCGTCTGG CTGTGAAATG GATCAAGGAG 120

AAACACCTCA TCCAAAGTTC AG

202

(2) INFORMATION FOR SEQ ID NO: 1399:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 165 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1399:

CGTTGGATCA CTGATGCATT CATAAATGGG TGAACnTAAT GTAATGTTAA ATCTATCACA 60

GCGCGATAAC AGCAAGAATA TAGTGAACAC CATAAATTGA GCATATCAAT GCCATATTCA 120

TGGATACACA TAGTTCACCT GGTGGTCGGT GAAAGCCTGT AGATG 165

(2) INFORMATION FOR SEQ ID NO: 1400:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 107 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1400:

ACACCTTTGT TTTTGCAAAG CTGTACCACA AAGTACTGGG TAGAATTCTA CGTTATATGA 60

GnCTTGCGT ATAGCTTCTT TTAATTCATA AACTGTAAAT TTCTTCG 107

(2) INFORMATION FOR SEQ ID NO: 1401:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 106 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1401:

TTTTGTCTAG nAACATCTGC TTCTAATAAT GATCGATCAG CAGCCATTGT GCTTAATCTT 60

TCATCCCACA TCACAATCTC AATAGAAGGA TAAGCTTCTA ATAATT 106

(2) INFORMATION FOR SEQ ID NO: 1402:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 102 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1402:

CAATGTTAAA CCTACACCGT TAACAGCACA CATGATACTA AATTGTTGGG GTGTCATATT 60
 5 ATACAATGTT GAGTAnTAAA TGGCGATGCA GATGAATAAC TA 102

(2) INFORMATION FOR SEQ ID NO: 1403:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 169 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1403:

TTTATTATTT GTGCTACAAC TACTTAAAAA AATCAGTAGA TATAGCATTa AACATATTTT 60
 20 CATCCCCyTG AATTTTAAAA ACTTTTTTCAA AAGCAACACC TCTAAAAATA AATaCAATAT 120
 ATTATAGCAA ATAGAAATTA TTATTTTGTT AAATTATGTT GTnCATGTT 169

(2) INFORMATION FOR SEQ ID NO: 1404:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 106 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1404:

TTAGTTGATA AGTAAATCCG AGTGACATTG GGATTCACCC CAACCGACTC TATTCCAGTC 60
 35 TGAAATACGT GAACCCATAA nATCCTATGT CCAGATTTAT ATTTCT 106

(2) INFORMATION FOR SEQ ID NO: 1405:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 309 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1405:

TATTTTTGCA GCAGAGATGT TCGCGACAAG GTTTACGCCA AATTGTCACT GCTACTGCGA 60
 50 TGTGTATTGC ATGCAAGTGC AGGnAATATA TTGAACATTT AAACGATCAG TTTAATTCGA 120

CTTTAATAAG CAATTTGTAC TGA CTGTGCA CATTGCGTCA TGGTCTGTTT TTGTTTAACT 240
 ATACTATnGG TGC GAAGTAG GCCTATGTTT AGAGGTCTAA CATGCCGTAG GTCTAATGGA 300
 5 TCAGGAACC 309

(2) INFORMATION FOR SEQ ID NO: 1406:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 144 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1406:

GTGGACCTGC AGTTAATTCA ACGATTTCAA GATGGGCGCC AAGAACGAAA CGTGGCCGAT 60
 20 ACTTAGGATT CTGGAATCAT CACATAATCG TGTGCATGAG GTGTTTCACT TTGGGGTCTA 120
 ATGATTCTTC ATGGAAnGTA TAGG 144

(2) INFORMATION FOR SEQ ID NO: 1407:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 115 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1407:

ACCTTTGCGT CCAGAATTAG CTACATGGTA AAGCTTCGTG TTACTATTTT AGGGATATCT 60
 35 TCAACnCGTT TCACTTGTAT AATTGTGTTT TGTAATTGGT GAAGTCATAG TATAG 115

(2) INFORMATION FOR SEQ ID NO: 1408:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 115 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1408:

ATTGGTATTG GCGCTGTAGT ATAGCTTCAT TATCTGATGC CATTAGTATA CGCACACTnT 60
 50 TTATTTATGG GCGTGGTATT CATCCTTATC GGGATCAATT ATTGGGTTAC ATTTT 115

(2) INFORMATION FOR SEQ ID NO: 1409:

- (A) LENGTH: 123 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1409:

10 AACCAGATGa AAAGCAAATA TACATATATA ACTCTACATG GGGTCGTGGT TTGGATATTG 60
 TTCATGATGC ATTCGGTATG CCAATGACAA AGCAATATAA AGATAAATTh CAAGAAGATA 120
 AAA 123

15

(2) INFORMATION FOR SEQ ID NO: 1410:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 120 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1410:

25

CThTTTTATAT TGAGGATTTT GTATCATATA TGGATAATCA TTAAAGGTGT ATGCTCTTGT 60
 TATCAGATCG CTACGGGTAA AATCGCTTCT ATAGGGCATT TACATGCGGG CTTCTGCCGG 120

30

(2) INFORMATION FOR SEQ ID NO: 1411:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 455 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1411:

40

TCTCGTATTG CGTTTAGAGA ACATGCGCAC AAAGGACAAA TTCCAGGTGT TAAAAAATCA 60
 AGTTGGTAAA ATCAAATTTT GTACTTTAGC CCATTTACAA TATCAATAAA ACAATGTACA 120
 GTATATACGA ATGCTATAAA CTGAATGTTT TCTCATATTA ATAAGGAAAC ATTCGGTTTT 180
 45 TAATTTGCAT TAAAAAATAA TTAGTTTTTA AAGGGGCTAT TTAAAGTGAA AATATTTGAT 240
 TACGAAGATA TTCAATTAAT ACCTAATAAA TGCATAGTTG AAAGTAGGTC TGAATGTGAT 300
 50 ACAACTATCC AATTTGGTCC GAAAAAATTC AAGCTACCTG TAGTTCCTGC GnATATGCAA 360
 ACAGTTATGA ATGAGAAATT AGCGAAATGG TTTGCTGAAA ATGATTACTT TTATAATCAT 420
 GCATCGTTTT GATGAAGAAG CAAGAATACC TnTTA 455

55

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 118 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1412:

ACAATGTCAA ATCACAATAG CTGTTGTAGG CATTGTGATTA CAATGAACTA AAGGCAAAAT 60
 TGGAGCAGTT ATCCATGAAT GATTAATAAC AACAnAAAGT ATGGGGTCAA GTTTAGGG 118

(2) INFORMATION FOR SEQ ID NO: 1413:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 245 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1413:

TGTTGACGAT ATAGGAATTA GCAAGAAATA GGCTAAGATA GTTTCGCACA ACTTGGGGCC 60
 CAnCCACTTG CTTGTTTGTA GAATTAGGGG TCCATTTCTC GTGTTGGGGC CCGAACTAAT 120
 AGTATGAATA TATATATCTA ATATTAAAC GGCAATATTT ATATGGTATA CATTTTATA 180
 TTTAGTnTTT GTATAGACAT GCTAATTAGC ACTTTCTAAA AAGGGTTGAA ATGATATACT 240
 GATGA 245

(2) INFORMATION FOR SEQ ID NO: 1414:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 252 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1414:

TTTTTGTTAT TCAAAATTTA GAGTGTGTTA TATGATAACG GTTTTTTCAT AGCGACTTGA 60
 TCATTTTTTCG AAATGATGAA AGATATGCAA GTTCAATCAA TCGGAACAAA AATACTATAT 120
 TATGGTAAGA AnTTCCCGAA GACTAGCGCA CTCACACACA AGTGCATCCT CGCGAACAAT 180
 GCGCACTTTT CACAAGCACA CAAACACAAG GCACAAGTGC ACGCAnTATT AGACAATGGT 240
 CTACCTACCA GA 252

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 112 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1415:

ATCTGCTGGA AGAGAAAAAA GACGCTCTTA AAAGTGGCTT TAGAAGGTCA AGATATAGAA 60
GnTATTAAAT CTAAAAAAGA AGGAAGTTGA AAAAGTGATT CCAGGAATTT TC 112

(2) INFORMATION FOR SEQ ID NO: 1416:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 124 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1416:

CTCAATTACA TTCAAGAAAA TGGGTGGAAT TACACAACGT TGGACTGAGA AGTATAGTTA 60
ATAGCGCAAA TGCnATAAGC CTTATATAAA AATGGGCACA ATTATTTTCAT GTACCAACAA 120
GAAC 124

(2) INFORMATION FOR SEQ ID NO: 1417:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 121 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1417:

TTCAAGAGCA CATACTGTAA CTCGTACGAG AATTTTTTCA AAATGACGCG TCAATCTCAA 60
TATCATCATA TGGTATTCCG AGTAATACCC CTCGnCACCT TTTTtaggta GCGTCAATAT 120
T 121

(2) INFORMATION FOR SEQ ID NO: 1418:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 123 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1418:

CTACGCCATC AAGAGGGTGT TAGTGCTATT AACTATTGCG GCGAGAGCAA TTAGTCGAAT 60
 5 GCAAATTAGG ACAAGTTGAT GAGTAACTAC nGCCAATATC GGTAAGTTTC ATGGCGGTTC 120
 AGC 123

(2) INFORMATION FOR SEQ ID NO: 1419:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 109 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1419:

CTTATAATCC TTACnGCAAT TTCACCTTGT ACGBAATTAA ACAACGGAGG CATTTACTTA 60
 20 CCCCCTTTAC TTAATACGTA CCAAACTTG GTCGTATTCA ACCATTGGG 109

(2) INFORMATION FOR SEQ ID NO: 1420:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 121 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 25 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1420:

GCTGTnGTGC TGCCAAGATG CTGATTGAAA AGTATATATG ATTGCATCAG TAGAAGAGCG 60
 35 AGCAGAAAGA AGATATAAAG ATAATCAGTT AAGAGGTGTC GAATCAAATT TTGAAGATTT 120
 A 121

(2) INFORMATION FOR SEQ ID NO: 1421:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 128 base pairs
 (B) TYPE: nucleic acid
 45 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1421:

TGTTTTTACA GTCACATACA CTAGGCATCC TAGCATTATC TAAATTTAAT ACCATCGCAA 60
 50 CTTGCGCTTT AATCTTCAAG GCCAATTAAA CCTCCTTCAT CTTTCTAACT GCTTAnATAT 120

(2) INFORMATION FOR SEQ ID NO: 1422:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 110 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1422:

GCCAATCATT GTCAATGTTT AGGCATCAaA TTTATCGAAT GATTTTCATT TGCCATGATC 60
 AGTCAAGGCG GGGATTTATT CAAAAATTAT GACGCCTAGT AAAAAATTTT 110

(2) INFORMATION FOR SEQ ID NO: 1423:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 111 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1423:

ATTACCTTGC ATGAATTTCC ATCTGTCAAA TGTGCGCCTT CACGAATTTG TTCGATAAAG 60
 ATACGTTGGT CACCGTGAAT AATTTACCA GCTGCATTTn TCCATGGACC A 111

(2) INFORMATION FOR SEQ ID NO: 1424:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 200 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1424:

TGTTGTGTGA TTGCGTATTC TCAGGTGAAT TCTTACATAT ATAGTACTTT TTGTTTCCGC 60
 TTGATTTGAC CTTGCATATC TTTCACATTC TTCGAAAATT GATCAAAGCh CTATTGAAAA 120
 ACCGTATCAT ATACaACCT CTAATTTTTT TGACTAACAA AAAGAATTCT TTGACGTATC 180
 AACTATATCA TCATGACTTC 200

(2) INFORMATION FOR SEQ ID NO: 1425:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 119 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1425:

TTTCTATAAT TTTAGACTAT TTCTACCATG TTGCTGAACA ATTTACTTAG ATAAAAATTA 60
TnAAATTTTG GTCAATTAAC AAAGTTAGTT TGTAAAAACG TATACTTTAA TTATTCCGG 119

(2) INFORMATION FOR SEQ ID NO: 1426:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 116 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1426:

AAAATGGCGT TGCATTTTAC TCTAATAACG CTCAAGGCCA CGGCAAAGAT AAATAAAGG 60
CACCTATTAT CGAACATAGT ACTCCTAnCG GACCTGGAAT TTAAATCAGA GCGGCC 116

(2) INFORMATION FOR SEQ ID NO: 1427:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 212 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1427:

TTTTATTTAC GTATAAGTGG GCGTTAGGTG TCACAGCGGT TGTCGATCAA AATATCATCA 60
TCAATCTTGT ATATGGGTTT GCGGATTCTT ATTTTATGAT TTTACAGAAC TATCCTAGGC 120
TTATTCTTTA TTAAAAGATG CAACnAGTTA TATAAAAAGA CGAATCTATC AACGCGAGCT 180
GCTCACAAGG CATCTCnTAT AGCGTCCACA TC 212

(2) INFORMATION FOR SEQ ID NO: 1428:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 265 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1428:

GAAAAATTGG TTCTGAATAT AATGGTGCCG TATACTTTAC GCCTCAAATC AAAGATTTTA 60

ATTTTAATGA AAAACATCGG TCGAATATAA CATAAAAAAA CGTCTATATC AAAAGCATCA 180
 TGAATAAACA GAGGAGCACA AAAATGAnTA AAAATATAAT CATCAAAAGT ATTGCGGCAT 240
 5 TGACGnTTTT AACATCAATA ACTGG 265

(2) INFORMATION FOR SEQ ID NO: 1429:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 145 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1429:

CGTACGAAGG ATTTGCAAAC TTCTTCATTC AACAAGCTAA AGAAGAACGT TTCCATGGAC 60
 20 AAAAGATTTA TAACTATATT AACGACAGAG GTGCACATGC AGAATTCAGA GCAGTTTCAG 120
 CACCAAAAAT TGACTTTTCA AGCAT 145

(2) INFORMATION FOR SEQ ID NO: 1430:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 115 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1430:

ACACCGCTAA GCGTATTAAG ACAGGATCTG AAAATGGACA CATCGCAATC GAATTATTGC 60
 35 AATGCCAAGT CATATCGGGG GTGAACCGCA ATTCAGGnA TTAAGTGGAT AGGTA 115

(2) INFORMATION FOR SEQ ID NO: 1431:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 211 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1431:

nATGTATTnG TGAAAAGGTC CTGAGTGGAC AAAAGACCTA AATATTTAAT GGTTCGATTAT 60
 50 CGCACGTCCA TAGTTGGTGA ACAGGAACTT ACACGTACAT CTAATCGCAG ACTATGCGTA 120
 AACTTTGGAA ACTGCTAGTC ATTGAAGCGT GGTATGTGTA TGCACGTAAA TATGCATTAG 180

(2) INFORMATION FOR SEQ ID NO: 1432:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 145 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1432:

GGAATGATTG ATAAATTGGA CTACTTAAAG ATTTCCGGTAT CGTGTCATTT GGCTCAGTCC 60
 ATGTTTAAATC ACCTATGnTG ACATGGTATG ATATTAGTGA CTACCAGAGA TATGGATGAT 120
 TTGGAACGTG GAGGACTTGA TCGTT 145

(2) INFORMATION FOR SEQ ID NO: 1433:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 169 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1433:

TTTATTGCAT TTACATAATA ATATCCTTTT GTTGTTTTGG TATTTCTATT CATATACAAG 60
 ACCATACCTT TAACTTTCAG AGCTTCCCCC TTATTTTGAG TTGCCATTTT AGAACCAATA 120
 ATCCATGTAC CTTTATCATT TTTATCAAAT TCGTCATCAC GATAACCTn 169

(2) INFORMATION FOR SEQ ID NO: 1434:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 102 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1434:

GATCTATAGT TCTGTAATCT GACGTGCTTT GCCATGTGCA CCACTCGTCn TAAAAATCAC 60
 TTACACTTAA CCCTTTTCCA CCTTTATCGT ATCCACCTTC AA 102

(2) INFORMATION FOR SEQ ID NO: 1435:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 116 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1435:

5 TTCTTATTAT ACAAATAGAA GCCATGTGTG CTTATATCGC AGCATCATGA CTCCTTTTTC 60
 ATTTGAATAT ATAAATAATA CAGnCGCTTT CGAATAAATT TAGGCTAATT CTACCA 116

(2) INFORMATION FOR SEQ ID NO: 1436:

10 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 144 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1436:

20 GGGGGTTTAT GTACTGGTGG ATCTGCAAAC TACTTGGCGT AAAGAATATA CAGATATGGT 60
 AAnGAAAAGT TTAGATTCAC ACGCCATCAC AATGGATTAG AAAAACCgAA TTTCTTCAGC 120
 AATTCTACAA TTTCTAGTAT ACGC 144

25 (2) INFORMATION FOR SEQ ID NO: 1437:

30 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 101 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1437:

35 GTTGCTGGGn AACCTATGGT CGAACATGTA TTGGTAAAGT GTGAAAGGCT CTGGTGGCGA 60
 TCAAGTTGGT AACCATCGTA GTACATGGTG CTGTAAATGT A 101

(2) INFORMATION FOR SEQ ID NO: 1438:

40 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 321 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1438:

50 AAAGATGGTG ACATTTTATA TAATCCGAAT GTGCCAAGTT ATTCAGCAAA GTATCAATTA 60
 AGTAATGATG ACTACAATGT GAAGCAACTT AGAAAGAGGT ATGATATACC AACTAnGAAA 120

AATTTAGAGT TTACATTTAT AGAAAATAAA GAAGAAAACA TCTATTTTAC GGATAGTATT 240
 AATTTCAAAC CTACTGAATA GGGTTAATAG AAGTTTGAAA TGAAAATTTC nTAAAGTGTG 300
 5 CAAAATAATT TGTCGCTTTA G 321

(2) INFORMATION FOR SEQ ID NO: 1439:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 135 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1439:

CAGTTGTAAT GGGACCTGGG CCAATCGGAT TACTTGTAGC ACAAGTGTTA AAAAGTAAAG 60
 20 GCGCAACTGT TGTGGGTACT GGGTTGGGAC AATTGACCAA GTCAGATTAG ATTAAAGCCA 120
 GAAAGCCATT GCCAC 135

(2) INFORMATION FOR SEQ ID NO: 1440:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 110 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1440:

AAATTATTTT GAACACTTTA TGAAATTTTT ATTTCAAAC TCTATTAACC CTATTCAGTA 60
 35 GGTGTGAAAT TAATACTATC AGAAAAATAC ACATTTnCTT CTTTATTTCT 110

(2) INFORMATION FOR SEQ ID NO: 1441:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 436 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1441:

TCTCTTTTGG ATTCATTAAG ATTGCnGCAT CGATACCAAC GTTmAACGGT GATTGTGTAA 60
 50 TGAATTTTTG CCACCAAGCT TTTTAAACAT TATTCTTTAA TTCAACACCT AAAGGACCAT 120
 AATCCCATGT GTTTGATAAA CCACCGTAAA TATCACTACC AGGGAACACA AAACCTCTGT 180

GAAAACGCCC CATGGAAAAT AACAGCATAG TAAATATGCT TTAⁿCTTCCAT GGGACGAGTT 300
 AATATTTTAA ATTGTATATA ATACAAAⁿA AGTⁿACGTAT TTAACCCGCG GTTCCACCCA 360
 AATTAGTGTA GTCACⁿTCGCT TTTATTTTAA AATGATTCTG TGCⁿGCAATC TTATTGTTAA 420
 GCTTACACTA TCCTTA 436

(2) INFORMATION FOR SEQ ID NO: 1442:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 461 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1442:

ATTTTⁿTAGAA GCATACTGCG AACGTCATCA CATCGATTⁿA CATATCAAAA AGTTAGATTⁿT 60
 GTCGCATAGT CTCGACCGAA ATAACAGCAT TCAGAATGAA GTCGGAATTA AACGTTACGA 120
 ATGGTTTGAT GAAATGATGA ATGTATTAGA AGCGGATGTA TTGCTAACGG CGCATCATTT 180
 GGACGATCAA TTAGAAACTA TTATGTATCG TATTTTⁿTAnT GGGAAATCAA CACGTAATAA 240
 ACTAGGATTT GATGAGTTAT CGAAGCGAAA AGGTTATCAG ATTTATCGAC CACTTTTAGC 300
 TGTCTCTAAA AAAGAAATⁿA AACAATTCCA AGAGAGATAT CATATTCCAT ATTTTGAAGA 360
 TGAATCⁿAAT AAAGATAACA AATATGTTAG AAATGATATT CGTAAnAGAA TTATTCCAGC 420
 TATTGATGAA AATAATCAAC TTAAAGTATC GCATTTATTA A 461

(2) INFORMATION FOR SEQ ID NO: 1443:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 143 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1443:

AAAGGTGATA AAAAACAAG GCATTGTAAA TTAⁿCTTGAAA ACCAAGTGAG TTATTACACG 60
 ATTCTAATⁿTG GGATAATGCG CGATATTTTA TTCCACACTT GTTACATTAT TGCTTTACGT 120
 GGGGGTTAGC GTGGAnTCAT CAC 143

(2) INFORMATION FOR SEQ ID NO: 1444:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 90 base pairs

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1444:

TGGTGTGGT TCATCAGTTG TAAACGCGAT TGTCACAAGA CTTAGAAGTA TATGTACACA 60
GAAATGAGAC TATATATCAT CAAGCATATA 90

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(2) INFORMATION FOR SEQ ID NO: 1445:

(i) SEQUENCE CHARACTERISTICS:

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(A) LENGTH: 218 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1445:

ATTGAACAGT GACAACAAAT GACAACAATG AATGACCAAC TGAGTTGCAG AATTGACCGA 60
CCTGACTTGC TGTnAGATGT GCATTGCCTG TGACCAGTTA ACTGCTGTTT GTACATTATG 120
ATTGTGCACG TGAAGTCTTT GCAAATGACT TTAAACATTA TGCTGCTAGA GCCATCTTTT 180
AAAGATGTTT GGACTAACGT nCATGATGTG AATATCTG 218

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(2) INFORMATION FOR SEQ ID NO: 1446:

(i) SEQUENCE CHARACTERISTICS:

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(A) LENGTH: 105 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1446:

TTTGACTTGA CATTATAGAA CACAAATTCA TTTGAAACTA TGTTTTCAAA TTTATTTATT 60
GTTACTGGGA ATTTACATT ATTAGATTTA TTTATTTTCT TTTGA 105

45

(2) INFORMATION FOR SEQ ID NO: 1447:

(i) SEQUENCE CHARACTERISTICS:

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(A) LENGTH: 104 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1447:

AGACTGAAAA CTGCATATGC AGAGGCGATG AAACAAAATG CCAT

104

(2) INFORMATION FOR SEQ ID NO: 1448:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 104 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1448:

TTGAATTAAC TGAAGAAntA GCACTGCAAG CAGGATTGTT GATATGACAA CATTCGAGTC 60
 AGAATGGCAA CAACAACGTG ATTCGTGCAC TCCAAGCACG TGCA 104

(2) INFORMATION FOR SEQ ID NO: 1449:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 349 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1449:

TATTAATTTT TTTTAATATG GAATATTCAT TGCATCGCTT TCCTATTCTT CAAGCCCACT 60
 TTTTATCTTC ATATACATTA ATTAACCACC KTCAAACATT GTCGTTAGAT TCGCCAAATT 120
 GAATCTATTT TTAGCACAGC AAAAAACCGA ACTGCTGAAA TAATGCATCT CCAACAGTCC 180
 GGTCTATTAA ACTATTTACT TATCTTTATT AAACAATTGA CATGATTTAT TAGAATAACC 240
 CAATTGGCAT GACCATGCAT CAGTAACATC CATGTTTAAT GGCTGCTGGT TTTTtaggTA 300
 AACCAGGCCA GAGTCATGGn TGGCACCTGn GCAACGChAC GATAAAGCC 349

(2) INFORMATION FOR SEQ ID NO: 1450:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1450:

GATTTTATAT AAATATAGCT TTTCAACAAA ACAAAATGATT GAATTTCTAG GAATTGAGTC 60
 ATTAAAAAAA CACTTGAAAA ATTCAGGTGG GATTGCGCTA TTGCCGGAAT TTATTGTTGC 120

AGAAACAACA TTGataATTA ATCCTGAATC GAATAAGCAm GTACTTGAAT CTTTTGTAAA 240
 AGATGTTTTT TTATAATTAT TGGTGAAAAC GTGTAGTTAT GGTGAAACTC AAAGATAATA 300
 5 ATTTAAATGA GATGTTAATG AAAAAGTAAT TCAATATAnA ACAGGTGATT TAnATCTTAA 360
 TAAGGnTAAT TCCAGGTTGA ATTCCAATTG CGGGCATCAT 400

(2) INFORMATION FOR SEQ ID NO: 1451:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 124 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1451:

20 TCGGTTATAG TTGCTATTCT CAATTATGTT CGCGATAATT TTAAGTAAAA GTAAGCACAG 60
 ATATTGAATT TGATAGGAGT TAATTGATAT ATACATACGA ACTTTCATGG ATCACTTAA 120
 TTnG 124

25 (2) INFORMATION FOR SEQ ID NO: 1452:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 126 base pairs
 (B) TYPE: nucleic acid
 30 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1452:

35 TGTATTAAAA ACCTTCCACC TTTAAAAGCA ACAATGCCGT GTCCTTTAAA TTCAAACATA 60
 ACCATATACG AATTACTCGA TAATTCTGTG TGTTTAATTG ACAGATGTCG TGTGAATTGA 120
 40 TnATTT 126

(2) INFORMATION FOR SEQ ID NO: 1453:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 280 base pairs
 45 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1453:

ACTTTGGCAA CATCTGGAAT ATCATATAAA TCAAGTAACT TACCTAACCG ATGATTAATA 60

CTAACAGTTG TTTCCATGCC TACACCTCAC GATATTATCA CTATTCATAT TAACATTATA 180
 TGTAAGAAAT TAAAATCTTT TGAAGCATTa AGATTACTTA TCATTThTAA ATTTCAATTT 240
 5 AAACTAACAG TAATTTATGT AGCTTTTGnA ATTCTCATAA 280

(2) INFORMATION FOR SEQ ID NO: 1454:

(i) SEQUENCE CHARACTERISTICS:

- 10 (A) LENGTH: 242 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1454:

ATATTCTTTA AATTAACTG ATCACTTGAA TAATTAACAT TACTTAATTC TATGGCATTc 60
 20 ATGATGATTc CTCCTCATAA ATGAACGTTA AAATATCCTG CAGTTCCTCA AGTGACATTT 120
 CGATGGCTTG CGCTTCATTA ACCAATTCTT TAACCAAATT TTCAATGGTA AAAAATTGTT 180
 TCTCTTTTAA AATAGGAACT ATTCTThGCT CCTTAACAAA GgNCCCTTTT CCTCTAATTG 240
 25 TT 242

(2) INFORMATION FOR SEQ ID NO: 1455:

(i) SEQUENCE CHARACTERISTICS:

- 30 (A) LENGTH: 110 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1455:

ATAAAATTGC AGACTTAGAT TACTCTTGTT CAGCATTTTT AATGTATATC GGTATAGATA 60
 40 TTGATGTGAC AGATCAAGTG AGACTTGcAT AntGGTATTT TATTCAGATG 110

(2) INFORMATION FOR SEQ ID NO: 1456:

(i) SEQUENCE CHARACTERISTICS:

- 45 (A) LENGTH: 551 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1456:

ACCAGTGGTT GCCTTTTTTAA GTCCCGCGTG GGACAAAAAT TAACCTCTTT ACACTTGCAA 60

AAAGCGCTTG CAATATATTT TCGATTTGTt ATTCAACmAA ACGTTTTATT tTATTCGCTG 180
 TAGTCAAATG TATACCCTTA TACTGACTCG aTAATCATTT GCTTATnATT TGAGActAGG 240
 5 ACATAAAATcA ATGCTCTAGA ATCCAAAAAG TCACATTAGT AGTAGTTAAC CGAACGAAAA 300
 TGCACCTTGTa ACAAGCTTTT TTCAATTAAA GTCAGGGGCC CCAACATAGA GAATTTTCGAA 360
 ATGAAATTCT ACAGGCAATG CGAGTTGGGG TGGGACGACG AAATAAATTT TGCAAAAATA 420
 10 TCATTTCTGT CCCACCTCAC TCAAAATAAA TTTCACTATC CGTAAAATAA ACAACTAACT 480
 ATTTAAGTAT CATCTCTCCC CTAATTAACA ATTATAAAAA TAAGAACCAA TATTCGAGAC 540
 15 AACCTAATTA A 551

(2) INFORMATION FOR SEQ ID NO: 1457:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 109 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1457:

ATCnGGGGCT GCATAAGCGA TATCAAGTGT GAGCATTGAA CGATTCAGGA CTGACCAGCA 60
 30 CGCCGTTTGC CTGCTTTGAA AGATCCACCG ACAAATCCGC CAACATCGT 109

(2) INFORMATION FOR SEQ ID NO: 1458:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 112 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1458:

ACCAGAGCCT CTTTGACTTC CTAAGTCGAA TAGCATCGTT GATATAGTTA AAGATGACGC 60
 45 TAGATTTAGn AATCCAAACT CATAACACCT CCACCATTC ATCACATCTG GA 112

(2) INFORMATION FOR SEQ ID NO: 1459:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 224 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

CCCCAACCAA TTTTTTAAAA AAGGGGGCCT TTGGGGGGGC CAACCAAGGG GGAACCCCTT 60
 AACCCCAATT TTGGCCAATT TTAAAGGGAA GGCCTTGGAA CCTTTTGGG AATGGGCCGG 120
 5 TTTTAAACCC TTGGTTTCCG GAAGGGGAAA ATTTTTAAAA AAACCGGAAT TGGTTGGCCC 180
 CCTTTAAATT AAAAAGTTCC CThAAAAAnA AATTCCCCCA AGGG 224

(2) INFORMATION FOR SEQ ID NO: 1460:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 135 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1460:

TTTCGACAAT CAATTGACG TCAGTGCCAC TCCATCTATA GTAAAGCGTT GATACTTTCA 60
 ATAATAACTG GATCACTGTC TAATTATAAA TGGATTCTTA CATCCCACCA TAATAAATTn 120
 CATATGTTCA TCACC 135

(2) INFORMATION FOR SEQ ID NO: 1461:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 114 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1461:

TTATAGAACC TCGTACTCCT nTCGACACTT GAATTTAAAT CAGAGCCGCC AGTGGAGAAG 60
 CATGAATTGA CTGGTACCAC TCGCAGAAAG TAATGATTCT AAGCCACTTG ATTA 114

(2) INFORMATION FOR SEQ ID NO: 1462:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 105 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1462:

GTTGAATTGT TGGTGATGTG GTTACACGAA TTTCGAATAA TTGTTCTTTA CGTCAAAACG 60
 TATCGTTCCA AAGTAATCCC CnGGTAATAG TTACCAACAA GTTCA 105

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 162 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1463:

TTGTATGACT CTTCCGACTT TGGTAAAATT GTGAACGCTG GntGAATGAT TTTTGTTTGA 60
 CAATTGGCCT TATCATCATT AATCGTATTT TTAAGCTGCT CGGATATAAG TTCTCAGCGA 120
 GTTCTTTTTG ATGTATCATT AGTGTAGAAA ATAGCTGTTT GT 162

(2) INFORMATION FOR SEQ ID NO: 1464:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 103 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1464:

TAAATTGGAA AGTCACATTC AAnATGCGAA AATGTTTTAA AATGTCCTGT AGGTGCTTAA 60
 TAGTTTTGCA TTTGCAAATT TTAAGTGAACC GGTTTAAACG AAT 103

(2) INFORMATION FOR SEQ ID NO: 1465:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 153 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1465:

AAATTGTATA ACTACCAAGC TTATATGAAA TGGTAAACAA AATATTATCA CTTGTTTGAT 60
 AAGTAGCGTG GAAAATATTG TATCTTTCTA AATGTACACG TTAGAAnTCA TGCTTATGTA 120
 TTACACGCGG GGCCTGGTA CCTAAGGGCC TAT 153

(2) INFORMATION FOR SEQ ID NO: 1466:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 124 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1466:

TTTCAGTAAC ATATGAAAAC TTAATTAACG ATGTTTCAGTA GGTTTCATACA TTTTACTTTA 60
 5 TGATGCTTAA TTGAATTACA nTTAAGATAT GACCAGCTAA AAAGAGTTAA TGTGATATTT 120
 AACC 124

(2) INFORMATION FOR SEQ ID NO: 1467:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 354 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1467:

20 AAGGAATTAA GTTTGCGACA CCAGCAAATA GTACTAATAA AGGAATATAT GGTAAGTCAA 60
 TAATTGAATA ACCGATATAT AAGAATATAC CTAAAATAAC ACTGACAGTT ACTTGACCTT 120
 GAATGTAAGA TTTTAATGTA AAGTTTAAAT CAGTTAATAA ATCTACGAAA AATACTTTAC 180
 25 GTTCACCTTT GAnAAATTTA GCAACAGCTG GGATAAATTT TTCATGGTCT TTTAACATAT 240
 AAATTAAGAA GAATGGAACC ATAATCAATA AGAAGATGGT TGAAATTAAT GATGTAATGT 300
 30 ACTGTAATGA ATTAGATAAn ATATTAGnAA CGCCATCACC CATTGATTTA ACCA 354

(2) INFORMATION FOR SEQ ID NO: 1468:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 120 base pairs
 35 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1468:

40 TGCAAACTAG GAACAATAAT GTTAATATAA CTATGATGnA AGTTAAAAAA TAAAAAGGAA 60
 45 CACTCTATAA TATGAATTAG GGTTTACAGT TTTTGTAGTA TTTTACAGTA TCAAAGTTTA 120

(2) INFORMATION FOR SEQ ID NO: 1469:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 476 base pairs
 50 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

	TCTAAATGCT GACTAAAACT AGCAACACGA GACTCATTAT TATTAGACAC GATTGTAATA	60
	GTGATTCCCTT TTTCATTAGC TTCCTTAAAC CATGCTTTAA CACGTTCTGT AGGTTCTTTA	120
5	ACATCCCAAC CTACTAGCGT ATTATCTAAA TCTGTAATAA TACCTTTAAC GCCTTTGTCC	180
	ACTAACTTGT CTAAATCAAT TTGAAATATT GATTGAACAT ATGAATTCGG CATAAAAAAC	240
10	TTGCGAACTA AACCCATTTA ACTCACCTTT ACCTTTTTTAT AATTGAGACA CTAATGCTTC	300
	AACAGTTTGA CTTGATGATA CAGCTGCTTT TTCTAAAAAT GCTTCGAAGC TCATTTCCGC	360
	TTCTCCATTT GCTAAGTCTG AAACTGCACG AACTACAACA AATGGTACAT TAAATTGATA	420
15	ACATGTTTGT GCAATTGCAG TTGCTTCCAT TTCAACCGCC ATCGCATTG GAAATG	476

(2) INFORMATION FOR SEQ ID NO: 1470:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 156 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1470:

	CACCATACAT GGGTAAGGAT ACTACTCAA TCAACTTGAA ACCAATAATn CATGACCATA	60
30	TGTGTGCCAA TGAATTCAAT TGGAAAGACA ATGATGAGAT ACTATTAAAA CGATTATATT	120
	TATTGTCACT TGTTCAAACG CACTCCTTTT CCAAAT	156

(2) INFORMATION FOR SEQ ID NO: 1471:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1471:

45	AACAAAAGTT TTGAAAAGCC GGGTGCCAGC GAAAACCTAA AAAGCACTTT ATCAGAAAAA	60
	GCTAAGAAAA AAGATTAATA TTCATTCAAT AAATATAAAT CCAATTTAAT TTGTTGTTTA	120
	AGGTCTACAA GTGTATGTTT AATATACAAT TCATCGTTTG ACGGTAAATC AGATACTTTG	180
50	AAATCTTGTC GCTCAACCTC TAGTAAATCG AAATCGCTAC CAGCTGAATT ATAGGTTTTA	240
	AGTTCACCCT CTTCAATGAT TCTGTTTTCA AAGTCTTTAA TAACTATAAA TACTGGTTTA	300
55	CCGTTGTTAT TAAACAACCT GTCTCTTTTG TCTAATAAGC TTATACAATC CAAATTCATA	360

(2) INFORMATION FOR SEQ ID NO: 1472:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 106 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1472:

CTAGGATTnC ATCTATTTGG GATGAAAATA AGCGTTTCCT GAATCCACAA GAATATCCAG 60

TCGATTTAAG CCAGGCATGT TGGGGTAATA ACATAACGTT TTTTGA 106

(2) INFORMATION FOR SEQ ID NO: 1473:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 117 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1473:

TATCTTACCT ACATTGTTAT CTGATGGCTG TAATCATTAA ATCTATAACA CCGAGTTCTT 60

CCATTAATTT TCAGCTTCAT TCGACTGCCT TTTTATnTTT CGTACTATTA CGAATTT 117

(2) INFORMATION FOR SEQ ID NO: 1474:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 164 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1474:

ATGCATGGCA CTGGAAnCAG CTGGGAGATA TAGGTAGTAT CCTAAAGAAG TTCAGTTAAT 60

CGGAGCGATT GTATTGCATG AAGGTAACAT TGC GGAGTGC CAACAGGCGA AGTAAACTT 120

AACGGCAACC ATGCCTTATA TTAAATGCCC TTCCGGGAAA GGAC 164

(2) INFORMATION FOR SEQ ID NO: 1475:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 210 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1475:

ACAGCAAGAC GTGACAAATC AGATACTATT AGTCATCAGC GTTAACATGT GGATAnGTGT 60
 5 GAGGTACGAA TAnCCGAAAG GAAATACGAC CTTTAAACATT CGCGCACAAA ATGAGCTCAG 120
 GCGCCTGCCT TGCCCATTTT TTAAATTATT TCCCTGGAAA TGATTGCTG TGTGCTGTTC 180
 10 TGTCCACAAC AACACGATTA ATGCCATGAC 210

(2) INFORMATION FOR SEQ ID NO: 1476:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 128 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1476:

AGGGTGATTT CACGGTTCGT CTGCCCATT T AATTGCGCAT TTTGCACACC ATCTACCGTT 60
 TGCAATTTTG GTATTAATTG TTGCATGCAG TACTGTCCGT TGACTTTGnT GCAAGTGCAT 120
 25 GCTCTTTC 128

(2) INFORMATION FOR SEQ ID NO: 1477:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 641 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1477:

AAAATCTGGT AAAGTAACTA GAGTTTAATA AATATATTGC ACATAAAAAA TGTGACCTTA 60
 40 TGTGGAGGAC ACATTTACTT AAGAACTAAG AGCTCAACCT CTTAGTTCTT TTTTGTTC
 CAAACAATAC ATAATGGTTC ATAGTGAAAT TCGAACTATC AATATAATTT GGTTAATACG 180
 TTTAATAATG GTTCTCTGTC AAATTGGACT TATGGGTTCA ATATCGATTT TGGCACATAA 240
 45 ATCAATGTAC TAGGACCTAC AATTTTCCTT TCAATAATAA ATCACGCCAT AATCTTCATT 300
 AATTACAGCG TGATTCATCT ATTATTATGT TATAAATkCT ATCTATAAAC GTCACCTTAT 360
 TAAATAACTC ATGCACTTTA TTAAAAATCC TCACAAATTT GAATATACTT AATTTAAATC 420
 TGTACTTCTA ATTTGCAAAA TCAACCCATC ATGTACAGTT ACTTTCGCTT GCAAAGACTC 480
 AATTTCAATTT GAAATAGTTA AAGTAGAACC TATATnAAGC ATTTGTCTAG CTAAATTATA 540

GATAACTCTT ATCTTTTTCa ACTGTAGGTG ACCTTTAGGG C

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(2) INFORMATION FOR SEQ ID NO: 1478:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 121 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1478:

TTAACCGTGA TGCAGAGTAG TAAGTGGATh CATGCTCTGT TATGGATGAC AAGACAAAGC 60
 AGCGAATATT GCGTACTGCG ATTGATGAGC AGATGCATAT GATTGGATTG GTGCAGCTGT 120
 C 121

(2) INFORMATION FOR SEQ ID NO: 1479:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 133 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1479:

ACCATTGCTT AGATAAATAC CTCGCAGTGA ACCGCATTAG TATAGCACTT CTAGCTGATC 60
 GCATCAGTAA AGTATGCTAT TAATGTCTCA GTTTTATCTG TAATGCATGT TTAAGTTAGT 120
 CATAGCATTa TTh 133

(2) INFORMATION FOR SEQ ID NO: 1480:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 201 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1480:

TTTTGGGGnT TTTAAATTTT AAATTCCTGn TGGGGGAAAT TCCCTTAAAA ATTCCCAACC 60
 CTTTTAAGGG GTGGGGGTTT TTTTAGGGAA AAAGGGGCC GGGGTTAATG GTTCCCAAAA 120
 AATTGGGGAA AATGGCCCC CAAATTTTAA ATTCCCGGTT TTAAAATTGG GGTGGGTAA 180
 ATTGGAAAAA CCCCCAAATT T 201

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 112 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1481:

CAGTATCAAG CATAGTAAAA AATGAGGGTA GGA CTGAAAA TACGGCGTTA TTGGTGGTGC 60
 ATTCACGGTA AATATGTTGC ATGACCAGCA AGTTTTGGnC TTCTGATGCA CC 112

(2) INFORMATION FOR SEQ ID NO: 1482:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 127 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1482:

CAAAAAACAA GTTCTGATAT GCAGTAGCTG AATAATTTTG CTAGTTACAC CAnAGTGATC 60
 TTCTGGTGT TTACTTTTTTA TAAATGTTTT CATATATTTT ATATGTATAA AAATGGGATT 120
 TAGCGTA 127

(2) INFORMATION FOR SEQ ID NO: 1483:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 83 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1483:

AGTGGTGTAT TGGGTGAGTA ATGCTTAACT TCATACCTGG TGCATTGGCT GTTCAGTATC 60
 ATTATATCTG CATGGGCGAT ACT 83

(2) INFORMATION FOR SEQ ID NO: 1484:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 201 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

TATTATTGAT GTTCTTTGGT TCATTCTTTG GTAATAATTT TGCACCTTGAA AATTTACAAC 60
 CGTTAGCTGG AACCTAGnCA AAGGGATGGG TTTAGTGGTC TATTGTGGGT TTATTGGTAT 120
 5 TCCGTGGGCC ACCCCATGGG GCCATTATGG TTTGGGAATT TTGGGAATAA ATTAATTTnC 180
 CCAACCAAAA ACCAGGCCAA G 201

(2) INFORMATION FOR SEQ ID NO: 1485:

- 10 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 210 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1485:

20 CTCACAGCAA CATCAAAGAG GCAGATATTA GTCAAGTTCA ACGTAATAAC ATCTACCTTC 60
 ACAAGTCGAT AAAGGAGCAC CATCATTAAAT AAGTAGATCA ACAAGTCAAC GAGAATTTTA 120
 ATGTGCAGAA TAGAGAAGTA CACCACACAn ATAATCAAGC GATGTAATTA CTACTACATT 180
 25 TnCATGACA GAGTGAACCT CAACAGCGGT 210

(2) INFORMATION FOR SEQ ID NO: 1486:

- 30 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 158 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1486:

CAGGTTATGT TTGCATTAGA AGTTCTTGGA AAATCTTTAT GGAACGTGGT TTACACCCTG 60
 40 ACTTTGAATT GCATCGATCT GATGAAGATA AATGAAATTG AATGGGATGG CnACATGGA 120
 ATGCAACCTA TGA CTGGAT GGAATTAGAT GAAGCGGG 158

(2) INFORMATION FOR SEQ ID NO: 1487:

- 45 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 114 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 50 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1487:

TTGCAGCATA TAGAGGTAGA GGCATCGCGA CAAAGTTATT AACGTCATTA CTTG

114

(2) INFORMATION FOR SEQ ID NO: 1488:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 108 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1488:

TGCTAAGTGA TAAAAAGAAT GATAAGCCAG GTGTACCAAT GGGTCCTGGA TTAGACCATT

60

TGGGAGATAT CGTTGTACCA CATGTGATC AACTAACGTT nCCACATG

108

(2) INFORMATION FOR SEQ ID NO: 1489:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 112 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1489:

CAAnACGTAA TTTCATGATG AAAGTGGTCG ATAATTTCTT GAAACATCGC TTTCAGTAAT

60

AACGCCTGCT TTAAGGTCAC GTTCCGCATA GGTGTACTGA GGATGTTGAT GT

112

(2) INFORMATION FOR SEQ ID NO: 1490:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 265 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1490:

CAGAACGTTT AAAACAAAGT TGGAAAAGTT TTCTAATCGT ATTAGCTGCA TGTTTAATAC

60

TTATTATTGC AAGTGAAACG CTTATTTTCC TTTAGTCATT TGACCGATGT TAAAGAGGTG

120

AGATGGTTAT TTAGAATCAT TGTATTGATT GTTTTTGCGG TAGTGATGTT CACAATTTAT

180

ATCTCTTATC ATCATTATAT GAATGACTTT TTAGTTACTA AGTTATTTAA TATTTCCGCA

240

GCGACGCCAt AGTTATTATG TCTAT

265

(2) INFORMATION FOR SEQ ID NO: 1491:

- (A) LENGTH: 113 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1491:

10 CnAAATTGGC CAGGGGCTCA TCCAATATTA AAATAGGCGT ACGAGGGATT AATAGACCAC 60
 CTAATGAAAC GCGTTGGTTG TTGGACCTCC AGATAAATCC TGGGGGTCGG TGG 113

(2) INFORMATION FOR SEQ ID NO: 1492:

15

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 276 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1492:

25 ACTAAGAAAA TCCGAAATCT TTTCCGCTTC TTTTAAATAC GTAATACTTC CTTTTTTTCG 60
 CTCTAAATGT TTGGCATTCA ACTCATAACT ATTCATTAGT TTCGTTAAGC CTTCTGCATG 120
 ACTCTCATTG TGAGAAAAAA TTTCCAAATG GTACGAAGAT GTTTCAGGGT TATTCACTGA 180
 30 GCCACCTGCC AGAAAAGCTC CTCTCAAGTA ACTGCGTCTC ATTTTCGTCAT CTTGAATCAT 240
 TGAAATGATC AATTTTCATGG CGnnAAAAATG CCGTCT 276

(2) INFORMATION FOR SEQ ID NO: 1493:

35

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 110 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1493:

45 GATGACGAGC GCCAATTATG TCACTTTTAT GGCAAAAGCT GGAAGTAAAC AACnAGCCT 60
 GCCAGTAAAA TTGGCAATTG GGACGTTCTT AGCAGGTGCG TCATACATAC 110

(2) INFORMATION FOR SEQ ID NO: 1494:

50

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 200 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1494:

AAAAAAAGG TTTTACCC GGAATTCCAA AnTTTAAATC CCTTAAAAAA AATTCCGGCC 60
 5 AACCCCCAAA CCAAGGTTT TTTCCTTAAC CTTGGAAnTA ACCAAGGTTT TTTTCCAAA 120
 AAATTTTCCA AAAAAGGAAT TACCCAAACC CTAAAGGTT TAAAATTGG GGGGGGAAAA 180
 10 AGGCCCTTTT AGGGGGGGAA 200

(2) INFORMATION FOR SEQ ID NO: 1495:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 253 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1495:

AAAAAATTG GTGCATTAT CATATGGAGT ATTAATCTGT AGAAGTAAAG GCGATATAAA 60
 25 TGTTACTTTG GTAATAAAGA TTACAGCGAA CGTTATTATT GCTCAGGTCA GATCAAGAAA 120
 TTGGTGTCG GGTGACAAGA CTTGGTGGCG CGGTGTAGTT TGTCAGTTGT GTGGTCATCT 180
 TAAATAACGC TATCGTACGG TGTGTATCAC ATGAAGGGAC TCTTACTAAT TCTGCAAGTA 240
 30 CACGTCACGC nnT 253

(2) INFORMATION FOR SEQ ID NO: 1496:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 104 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1496:

ACGCTAGCTT CTGAAAAAAT AAGTGAAC TA TGGATGCAAT GAnCCTATTCTGAATGATA 60
 45 TTAGACGTAG CGCACCTGGT GCAGAACGCC AATAAAAAGA CAAG 104

(2) INFORMATION FOR SEQ ID NO: 1497:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 100 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

AGGGAGGCGC CCAAATGGCT CTATATTAAA AAAGGACTCT CAGAGCATT A TGAAAAGTT 60
 GAAGCTCAAA AGGAAnCGAA AGAAACAAGT ATCAAAACAT 100

(2) INFORMATION FOR SEQ ID NO: 1498:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 101 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1498:

TGGAAC TTTG GGGAAGTCAA ACGGTTGTAA TCGTTGAACA TAAAGTTAAA CACATTCTGG 60
 ATCATGTCCA nCGCGTCCAT TTGATGGATA TAACGGGAAT A 101

(2) INFORMATION FOR SEQ ID NO: 1499:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 127 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1499:

AGTTCTGGTG CATCGTTTTT CATTGTATTT GTGACGATTA TCATTCCAGC ATTAGAATAT 60
 TATGCATTAT ATTTAGGTGT GATAGGTGCA TTTATAGGTG GTTTAACTGT TTATACACTT 120
 TCAGGTG 127

(2) INFORMATION FOR SEQ ID NO: 1500:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 560 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1500:

TCCCCGCTTT AATACCTTCC ACGATTTCTT TAATTGCTTG CGGTTGGTCA CCTTGAGGCT 60
 CAAAATCAGA ATGTATTTTA AAAGGATAAT GTTCAACCAT TGTCACATAT GCCTCCTCTT 120
 TCAACGTATT ATTTATATTT CCGCTCAACT CTTTGCTTTC TCATnACATA TnTTAGCAAA 180
 GTAGTCACAC AAAAaGCAAA CGTTkGTTTCG TAAAAATGTC GAACAAaGAA AnACAAACAT 240

AAATACACAT TATATTAATC ATCATTTTGT TTCAACAAAT TTGTTTGAAA CATTATTTTA 360
 AAGTTAATCT TAGCGATCTT CATCTTGATG TTTATGAAAT TCGAGTTGAT CTATAATTAA 420
 5 ATAACCAGCT AATAATGACA CTACATCAAT AAAAATAATC CACTCGTTAT GGAAATACTC 480
 TTTATAGATT GAGGCACCAA TTAAATTAA TGTCAGAATA GTACCGACCC ATTTACTTCT 540
 10 TGTTATTACA CTAAATAATA 560

(2) INFORMATION FOR SEQ ID NO: 1501:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 102 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1501:

ATTAAATCAT ACTnACAATT ACCGATGACA TTATTCCAAT TCAATCTAAT TCCGTGATGA 60
 AAGAGCCACG TTTTGGTTAC TTCGTGGGCG TGAATTATTA TG 102

(2) INFORMATION FOR SEQ ID NO: 1502:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1502:

TATGGTAGCT CCAAATGGTT GTATCGTCAC ACCATCATCT TCAAGTGCAA TGCGATGTAA 60
 TCGATTGGCT GTTGTTTCTG TTACCCATAG TACTTTTTCA TCTGTACTTA AAGCAATACC 120
 40 ATTTGCTACG CTAATATTTT GAATGATAGG CGTCACTGTT CTAAAGTCCG GCGAAACATA 180
 ATAAACGCCT CCTAGTGGAT TGGTAGAGTA TCCTCTAAAA TCTGTAAAAT AAAATCCACC 240
 TTTAGAATCA AATACCATGT CATCAATACA ATATGCTGTT GAAAGATCTT CAATAATATC 300
 45 TTGTAAGTTG TCACCATTTT CTGTAGCTGC AAAAATGCCT CCGGAGATT TAAAATCTCC 360
 nAAAATAACC AACGnATAAA TCGGGCAnCT TATGGAATTG 400

(2) INFORMATION FOR SEQ ID NO: 1503:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 168 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1503:

5 TACAGGTAGT TAACAGTTGA TGTTAAATGG CGTACTGGAT TCTTTACGCA CGATTTTTTG 60
 TTAATAAGTA TGGGATAGCA CATTACTATA TCCTACTTAC GACTTATTGG ATATGTCTTA 120
 GCTATTCTTA AGCTCGAAAA GTTTCACAGG ATACATAAGG GACCAACT 168

(2) INFORMATION FOR SEQ ID NO: 1504:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 237 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1504:

20 CTACTGATTG TGTAATGTCG TTGGTAGGCT TGGGCTGTAC GCAGTATTAG GTGTAGGCAA 60
 CTTGGCTTTT GGCATCTACC TTGTATGTGT CGTGTATCTA nGGCTGGGGC TTGCTCCTTC 120
 25 AGTTGTTAGA CAGTAGGGGG TAATCTCAGG GGTGCAATGT ACTCCCTCCG TCCTAAAATA 180
 CTnTATATGC TCGTGCCGAA TTCCTGCAGC CCGGGGGATC CACTAGTTCT AGAGCGG 237

(2) INFORMATION FOR SEQ ID NO: 1505:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 209 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1505:

40 CGCATTTACC ACCATATGAT GGATCCAnCG ACGTTTTAAT AAAGATAAAA GTGACAGTAG 60
 CGGGAAAACA GGnCCATAAT TCACATCTCT TTTGAAAAAT ATGTTCAAGC TAGGATCATT 120
 AGGAGAGTCA TATTAATAAT AAAAATGTTG CAATCAATCG ACGTGCGTTG AATCTTAAAT 180
 45 ACATAATAAA TGTTGTAGAA GATATGGGT 209

(2) INFORMATION FOR SEQ ID NO: 1506:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 121 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1506:

AAAATGTGGC TATTGATTTT GACTTGGAAC TTTTGAACA TTTCTCTCAA GGATTAAAT 60
 5 GTAGGTAACA GGGCAGGTAC TACGGTACTT nCCTATTTTT TTATGCAAAT TTTAAAAAAC 120
 A 121

(2) INFORMATION FOR SEQ ID NO: 1507:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 144 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1507:

AATGACAAGG TCAGCATTAA AACCATTAA AAATAAACGC GTTATGGTTA CTGGACGTAT 60
 20 ACAACGTGTT TTGTTTAAAA ATTATTTAGA TAGACATAGC ACATTAAAGC CGAATGTAAG 120
 GATATTATTA AAAGAnGTAT TTGT 144

(2) INFORMATION FOR SEQ ID NO: 1508:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 139 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1508:

CCGATTGAAT CTGTGTACAC TTCACCAAAG ATATCTTCT TCGTTTCTTC AGATAAACTT 60
 TCCATTGCTT TCTTATCAAC ACTTGTTTCT ACTAATAAGT GTGTTAATTT GTGCTTnTTA 120
 40 ACAAACTCAA TAGCTTGTC 139

(2) INFORMATION FOR SEQ ID NO: 1509:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 155 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1509:

TCTGCCTGCC TCGGCCTCCC AAAGTGCTGG CATTACAGGC ATGAGCCACC ATGCCTGGCT 60

CAAGTTAAAA TACAGATGTA AGACTTGACT TGATC

155

(2) INFORMATION FOR SEQ ID NO: 1510:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 87 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1510:

ATCCCAATGC TAATGAATTT GCATATACGA TAAATAATGC TTTTATCAT CAATAAAGCT 60

ATGAATCTTT CAAGATCTTC ATTGAAC 87

(2) INFORMATION FOR SEQ ID NO: 1511:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 217 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1511:

ATAGGCGTTT ACCAGTTATT TTCGAATCCA TATAATTATG TTTGTCCGTT TGGTTTAATC 60

CAATTAATTG ATTAAGTTTT TCCAATTCCT TTTTTTTTAA TTAAAATTCC AATCCTTAAA 120

AAAAATTGGA AAAAAGCCTT AAAAAAATT GGTAAATTTT CCCAAGGGAA TTAAAAATTT 180

TGGGGTTTTT TnAGGnCCCT TTTGGGAAAA ACCCAAC 217

(2) INFORMATION FOR SEQ ID NO: 1512:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 101 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1512:

TGACATTGCA TCGGATTATG TTACATCAnG GACAACGGGC CTCAAAAAGC GGTGCACAAA 60

CGTTCCGTAA TCATATGCCA GTGCAATCGG ATGTAAAGAG A 101

(2) INFORMATION FOR SEQ ID NO: 1513:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 114 base pairs

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1513:

GATTTTATTG AAATGATTTT ACCTGTGATC AATTATTGTA ACAAATCTAC AATAAAATTG 60

10 TCTTACTGCA TGACCTAATA AnATAGCAAC AGATATCATA CACACTTGTA ATTT 114

(2) INFORMATION FOR SEQ ID NO: 1514:

(i) SEQUENCE CHARACTERISTICS:

15

(A) LENGTH: 77 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1514:

ACATATACAG GTACGTGTTT AGTCCGTCGT ATACTGCAA ATTATGTCCG ATGAAATTAG 60

25 GGGAAAATTG TAGAACG 77

(2) INFORMATION FOR SEQ ID NO: 1515:

(i) SEQUENCE CHARACTERISTICS:

30

(A) LENGTH: 102 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1515:

CCTTATAAAG TTAATGCAAG CAACATGGAC AAATTATTAn TTGAATAAAC TGCAAGAAAG 60

40 ACAACAATCA TTCTTCGGAA TGCTAGGAGA ATATATTTTA GA 102

(2) INFORMATION FOR SEQ ID NO: 1516:

(i) SEQUENCE CHARACTERISTICS:

45

(A) LENGTH: 89 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1516:

CAATTTTAAA TAGGATTTTT AAGACCTTGG TTGGGTTTTG GTACAATTAA TGGGGACATG 60

ACTAGGTCTT GCCACGTTTA TATGCATCT 89

55

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 102 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1517:

GTAAGAGTGC ATAGTTTTTA AATGTTGCTT GTCTGGTnTC ATTTTGGCAC CATACAGTTC 60
 GTACCTGGAT TAGGGAAATG CCAAATGTCC GCGTAGTGAT AT 102

(2) INFORMATION FOR SEQ ID NO: 1518:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 448 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1518:

GAGAACTCCT TACCACAATC AAAAGTAATT GATTTAAATA TATGAGAAGA TAAAATGAAA 60
 AGGTGCAAGC AGTATTAAGA ATTTAGGTAG CAAGAAAACA AGAAGTGGTA CATACGATGC 120
 TAACCTAAAA AGAATTGGAG ATTAAAATGA TTATTAACCT TGAAACACAA CAAATACATT 180
 TTGATTTAGA ACATGAAATT CCCTATTTTC AAGCACCTGA GAAAAATAGG ATACGCTTAG 240
 ATATTGATGT TCTCAATAAA AAGCnAATTT CTAATATTAT TAATGTTATA TTTAATAACC 300
 AATCAAAGAC GAAATGTACA TTTTGTCTG AATACTTATA TCCTGTTAAA TTTAGAGAAA 360
 AAACAAGAAT TGGTCGTTTT TTAAATATTA CTAAGTGGTA CGAAGAAATC CATTCTACCG 420
 ATGAGAAGTA TGThATTGCA ACTATTAA 448

(2) INFORMATION FOR SEQ ID NO: 1519:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 304 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1519:

ATGGACGAAA GAAGATGTCA TTGCTTTTGA AAACCTAACA AATATTAAAG TAAATTTAAA 60
 AGGTAGCGGT TTTGTGTCCC ACCAATCAAT TAGTAAGGGA CAAAACTTA CTGAAAAAGA 120

ATTCAAATTC AGATGGTnAA GAAGAAATCT GACAGTTAAA ACTGACAGGG ATAAGTCGGG 240
 ACTnAACAGG AATGGGCTAC nTTTAAATTT AGGGATGGTA TTGGGCCACT ATTTGGTTTT 300
 5 TGAC 304

(2) INFORMATION FOR SEQ ID NO: 1520:

(i) SEQUENCE CHARACTERISTICS:
 10 (A) LENGTH: 322 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1520:

ATGACGTCGC ATGCACGCGT AcGTAAGCTT GGaTCCTCTA GAGCGGCCGC CCTTTTTTTTT 60
 20 TTTTTTTTTT TTTCTGTTGG CCTTTGATAA TTTTATTGGA TCAGTAACAA CTTTTTGTGT 120
 TTCAACTAAG ATAGCTAAAA TTCTAACACT TATATGTAAA AATTACACTC CATTTTAGCA 180
 CAAATGTAA CAGAAATTAA CAGCACAGTG CCATGAAGAA ATGAnAAATA CACAGCTTTG 240
 25 GTAGGGnAAT GGTCTCGGAA ATAATGTAAT GCCAAGTnTC TGATCATTTA ACATATCACT 300
 CACCTCCTTC TTCATCTGAT GT 322

(2) INFORMATION FOR SEQ ID NO: 1521:

(i) SEQUENCE CHARACTERISTICS:
 30 (A) LENGTH: 105 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 35 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1521:

TAAATACAAA CCCTTTAAAC ATATTTACTA AGTCGTTCAA TTGTTGATTT GATAAnTGAT 60
 40 GTGATGTGGT ATTTTGCATC GGTCTGCTT GATTCCAGAC ATGTC 105

(2) INFORMATION FOR SEQ ID NO: 1522:

(i) SEQUENCE CHARACTERISTICS:
 45 (A) LENGTH: 118 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 50 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1522:

GATCGTATTT CCCAGATGTA AATTc_nGTGG ACAATTGGCG TCAAATAGCT TCTAGTGG 118

(2) INFORMATION FOR SEQ ID NO: 1523:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 157 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1523:

CnGCATATAA TCCCGCGACA TGTCTTTTAC GGGTGCACTT GTAATATTAT TACCCCCCGT 60
 ATAACCCATG TATATCTATA CTTTACCACA TAAATAATT CCGGGACTAT TTGGCACATG 120
 TTTTGGGTGA ATTTCTTTAG TGGCACACCA CCCCTGG 157

(2) INFORMATION FOR SEQ ID NO: 1524:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 82 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1524:

ACTGAGGTAG GTTATGTAGG ACGAGATGTT GAAAGTATGG TTAGACATCT TGTTGATCCT 60
 TGAGTAAGAT TAGTCAAGGC CG 82

(2) INFORMATION FOR SEQ ID NO: 1525:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1525:

GATACAAAAA AGAAGTTCAA TTTGAACTAT GAAGAAATTT ATATTTTAAA TCATATTTTA 60
 AGAAGTGAGT CTAACGnAAT CTCATCTAAA GAGATTGCTA AGTGCTCAGA GTTCAAACCT 120
 TACTATTTAA CTAAAGCTTT ACAAAGCTA AAAGATTTAA AATTGTTATC AAAGAAAAGA 180
 AGTTTACAAG ACGAAAGAAC AGTTATTGTT TATGTTACAG ATACACAAAA AGCAAATATT 240
 CAAAAACTGA TTTCAGAATT AGAAGAATAC ATTAAAAAATT AAATCAAGGT TAATTGCGTT 300

AAAATTAAC TAAAATTAA ATATTGAAGA GCTTAATTAA

(2) INFORMATION FOR SEQ ID NO: 1526:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 125 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1526:

ACTGTCTAAT ATCACTCCC TTAAAGTGT TTTTCATATTT TTCTATTAA GTTCATATTG 60
 TAGGGTGTG AATGCATCTA AGCATTCNCAA GTTATTCTCC AAGTTCATCA ATTCAAAAT 120
 GGAAC 125

(2) INFORMATION FOR SEQ ID NO: 1527:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 112 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1527:

CATGTTTATT TATGTTTCGG CTTTAATGTT GAAGAGTTTT ACAAGTTTA CCGATTGCAT 60
 TTTATAATTT TAATGCATTA TTGGAGCATT GGCTATCATC TATTACTGCG NA 112

(2) INFORMATION FOR SEQ ID NO: 1528:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 115 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1528:

GCGAAGATGA GGATGAGATG ACTAAAGGAA AATATTGAAA AACAACCAAA AAAGTGATGA 60
 ACATTATTAA AAATTTACAA AATCAAATCG ACAACTTGAG CGCAAGAACH AACAG 115

(2) INFORMATION FOR SEQ ID NO: 1529:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1529:

5 ATGGATCTTC CGCTTCTCTT AATTGATCAA TTAAATCAGA CATTTTCATGT TTTTGTAAT 60
 AATGATTCGC TTTAATGGAT TTTTACATG ACATCATGAT TGCTACATCT TCACGTAATT 120
 10 TTTTGATATC TACTTTTTTC TCTCCAAAA TTAGCTCAAT CATATCTTTA ATAATTCTT 180
 CTACTTCATC TTTAGGGAAC CAAACTGGAT AGCTACTTAC AATATAATCA TGACCACCAA 240
 AATGTTCTAA CATGATACCT ACTTGTGAA GCTCATTTTT ATATTGATCA ATGACTAATT 300
 15 GTTCATCTTT TGAAAAATGA AATGTTAACG GGATTAATAA ATCTTGACT TCATTGGTAA 360
 CCTCACCTAT TTAATCTCGA AAATATTCAT ATnTTATnCT 400

(2) INFORMATION FOR SEQ ID NO: 1530:

20 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 97 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1530:

30 TAACAGTCAA CCCACCCATT AATATATATT CAACGGCTGA CTGATACGAC GAACGTCAA 60
 GAATATGAGA GGAATAGGGA CAAGATCATC ACACATA 97

(2) INFORMATION FOR SEQ ID NO: 1531:

35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 150 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1531:

40 TCATAACGGT GCAACTTAGA GCTGACGTAT AGTTCATTCC AACTATATAC GATGTATCAA 60
 45 CACCATGTTT CAGTTTTAGG TTAACGATAC TGTATACCGT ATTATGTCAG nGGCACCTTA 120
 TCTTCACGTA CTTTACGGCG AGATGATGAC 150

(2) INFORMATION FOR SEQ ID NO: 1532:

50 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 138 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1532:

5 ATTCATTCTG CTAACCAGTA AGGCAACCCC GCCAGCCTAG CCGGGTCCTC AACGACAGGA 60
GCACGATCAT GCGCACCCGT GGCCAGGACC CAACGCTGCC CGrCCTATCC TGAAGCCAAA 120
GGAAATGAGA TCGGAATT 138

10 (2) INFORMATION FOR SEQ ID NO: 1533:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 460 base pairs
(B) TYPE: nucleic acid
15 (C) STRANDEDNESS: double
(D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1533:

GGGGnCCnGG CAATGGAGGC GTGCTTGGAT GGTGCTTGA ATCATCCCTT TGGCCTCGAT 60
CATAAGCTTA AACTTTTGGT GCTGGnGCCA CTGGAGGGAA ATCTTCAATT CTGGCAAATG 120
25 GTAATTnCTT ATACCAACAT TTAAGGCATG TGGTAATGCT GGCTACTCCC GCTTCGTTAT 180
CAGCTACATG ACAAATACAG ATGCCATCAC CTTTGCCTCC ATTTTAATCG TTGATGCTTG 240
GAAATGTTTT TTGTAAATAT CAATGTTATC CTTGCGTGTA TGTATCGCAT TTATATCTGG 300
30 TAGCAAAAAT GTTCCAACAG AAAGCCCTAT ACCTAGTTCG GCAGCTATTT TGGCAGATGT 360
TGCGCTACTA CTTAATAACC ACATTTCTGG AAAATGATCA TGTGTGGTGC ACTACGATCG 420
ACTTGGTTAT CTTTATTGTT AGATAATACG GAATACGnAA 460

35 (2) INFORMATION FOR SEQ ID NO: 1534:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 145 base pairs
40 (B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1534:

TACGCTAATA AATAGTTCAC TTTTCCATTT TGTGTAGTCA GCTCATTGTA TTCTTCAATT 60
TGCTCTTCAT TTAATGCCGC ATAAGCTTGA TCAATAATAT TTGGATTAAAG TTGTCCAATA 120
50 TACTCTAACT GGTCAATGATA AACAn 145

(2) INFORMATION FOR SEQ ID NO: 1535:

- (A) LENGTH: 151 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1535:

ACGCGATTTA ATCGTTCGTT CCAACGATGT CCACTCCCCT ACTAATAATT AAAATCATT
 CAAATTATTT CAAACTTTAC AATTnAAACT AACAGTTTTTC TCAATAAAAAT GCAAGCTTTT
 CTCATTTGTT ATTTAGAATG ATTATGATTT A

(2) INFORMATION FOR SEQ ID NO: 1536:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 86 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1536:

ATAATAGAAT CATTACAAAT TATTTTCAGAC TTTACAATTA AGACTAACAG TTTTCTCAAT
 AAAATGCAAG CTTTTCTCAT TGTTAA

(2) INFORMATION FOR SEQ ID NO: 1537:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1537:

ACCAAAGTGT AAAGCCATAT ACTGAACATA TTGATAGCAT ACTCAATGAG ATCAAATTAC
 ATCGTGAATT TATTATAGAA GTACCTTATA TGAATTCAAG GAAATTTGAG CTAAGTATTG
 CTAACATTGA ACAACTTTCT GTCGAATGTC ATTTTAAGCG AACAAAGTCGA AAGTTATTTA
 TAGAAAAGCT TAAAAGTGTT CAATATGATT TACAAAATAT ATTAGATGGC GTAACACnAG
 AGGGTACTGA TGGTTAAAAC AGTTTATGTA ACAGGTTACA AATCATTCTGA ATTAAACATT
 TTTaAAGATG ACGCACCTGA AGTACATTAT TTAAAACAAT TTATAAAACA TAAAATTGAA
 CAACTGTnGG ATGAAGGATT AGAATGGGnG TTAATACAAG

(2) INFORMATION FOR SEQ ID NO: 1538:

- (A) LENGTH: 136 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1538:

10 ATATCGTTAC TGCTGTATGT TTCAATATCT ATATTCATAA ATTTCAAATn CTGACACCTC 60
 AATTTCCTTTA AAATAAGGGG CAGAACCCAC TATGACTATA GGATCTCTCA CAGGTCAATT 120
 CGCAAATCAC TCGTGC 136

15 (2) INFORMATION FOR SEQ ID NO: 1539:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 85 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1539:

25 TAAATATCTC GGCACAATGA TGCGGGATAT TTTTITACAA TAGGCATAAA GGCTGGAAAA 60
 AACATATCTA GTGCTATGAT ACTTA 85

30 (2) INFORMATION FOR SEQ ID NO: 1540:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 73 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1540:

40 ACAATTTGTT TATTTCAACA AATTATCTTT ATTCCACGAT GTGCACAAGT GGTTGAAATC 60
 AGCTGAAGAC ACG 73

(2) INFORMATION FOR SEQ ID NO: 1541:

45

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 106 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1541:

55

TGCAGGAATT CGATATCAAG CTTATCGATA CCGTCGACCT CGAGGn

106

(2) INFORMATION FOR SEQ ID NO: 1542:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 87 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1542:

ACATCAACTC ACCCATAATA TATATTCACG GCTGACTGAT ACGACGAACG TCAAAGAATA
 TGAGAGGAAT AGGGACAAGA TCATCAC

60

87

(2) INFORMATION FOR SEQ ID NO: 1543:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1543:

GCTTATTCTG AAAAATATTT AAATTGAAGA AAAGAATATT CTAACACGG AAGTGGTATT
 AACTAATAAC TAGTATCCTT TATAAATAAA CATAAAAATA TTCAAACGAA GGTCTACTAA
 ATAACTATCC ATAAAGTGAG TATAAGTTTG TTTGTAAAAC TGAAGTAAAA AGCATAAGGA
 ATTACACTTT AAATACATAT AGTACTTACG AATAGAAAAT AATCCCTTCA ACAGTAATTT
 TTAAACAAAA ATAAGTGTTG TTTTATGTTG ACTCTACTAG AATAACTTGA TATTATATAA
 AAGTCGTCAA ACGGCACTAA TATTTAnnAA ACAAATGTTT TAAGTTGTTG GATTThAAAA
 TATTGAATTA AAGTGTAAT TTGGACTATT GGAAATTGCG

60

120

180

240

300

360

400

(2) INFORMATION FOR SEQ ID NO: 1544:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 103 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1544:

ATAACGCTAA TCAGCCACAT TCAGTATTGT TAAATGGACA CACAAGCAGT TGATGAAAT

60

(2) INFORMATION FOR SEQ ID NO: 1545:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 108 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1545:

GGCTGTTATT GTTGTGGAGT TAAAAATGAA GGAAAATTAT AAACATGGTA AGCGTGTTTC 60
 TCGTATTACT TTACTTAAAC nAACGGTATA ACCATACCTA ACTTAGTA 108

(2) INFORMATION FOR SEQ ID NO: 1546:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 554 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1546:

AAATATGTTT CATATATTAT GAATCTAGCC TTAATCATAT TGCATTCAAA ATAATTTTAA 60
 AAAATGAAAA GAAAGGATTT AGCATGCAAA AATTCAAAGA CTTTTTTTAC GATGATTTAT 120
 CGGTTACACG AGGAAATTAT TTTTAACTT TAATGGCAGC ATTTTTTATT ACTATCATTT 180
 TATTTATCGG CATAGTTGTC AGTGAAGTAC ATTTACTTTA TAGCATGCTA ATTGTATTAG 240
 TAGGTTTAAT TCTATTGAGG CTATTCAAAA TCAATTTATT CTCTTTTAAA AAATTAACAT 300
 TGTCTCAAGT TATTTATATT ATAGGCGGTG CACTATTAAT TTATGGGTGA GATAATCTTT 360
 ATTTATATTT TCATGACGTA CCGGCAATGA ACAACAATTA GAGCAAGCAA TACGGAAATA 420
 CACCATTCTA TATTTCTATT TtCACTGTaC CATCATCCCC GCTATTGTGG aAGAAaTTGT 480
 TTTtCGCGGT ATGATAATAA GGGkTATCTT CAGAAAACAC TTGTTTTTAG GGTTAATTGT 540
 GTCTAGTTTA GTTT 554

(2) INFORMATION FOR SEQ ID NO: 1547:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

TAAAGCAACA CTTTAAATCC CTTTGAACCT TAGTTTATCC GCTAAATCAT AAGCTTCTTT 60
TTTGCTACTT ACAAAAATCA ATCCTTGTA AATTTCACCT GAATATCCAT AGTAATCTGT 120
CTTTTGAATA ATATAATTAA CTCTTTCATC AGAAGTTAAA TATCTCAGTT TAGTTACATC 180
ATCTTCTTTA ATACCTTGAT GTACATAATC AGTCACACCA AAATAATGAA ATGGGACATA 240
AAATATCACT TTCTAATGCT GCTTGTAACC TTATTTTATA TGCAATATTA TAATCAAACA 300
GTTCAAATAT ACTTAATTCA TCTGGATCTT TCTGGTGGTA GGCAGGTCAT TCCCAGCAnG 360
AACTTAGGGT TTGGAGGTAG GTTAAATAC TCGGTTGGAT 400

(2) INFORMATION FOR SEQ ID NO: 1548:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 73 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1548:

CGCTCTAGAA CTAGTGGATC CCCCgggGCTG CAGGAATTCG GCACAGCATA TCTAGTATTT 60
TAGGACGGAG GGA 73

(2) INFORMATION FOR SEQ ID NO: 1549:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 73 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1549:

GATCCAAGC AGCTTTTAAA CAATATGGCA TAAACATTAT TAACGGCTAT GGTTTAACTG 60
ATGGCACCTC TTG 73

(2) INFORMATION FOR SEQ ID NO: 1550:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 120 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1550:

GTAACATGTA TAGTGAAGTG ACTACTAAGA AGnCGTATTG TGATATTGAT AGCAGCTGAT 120

(2) INFORMATION FOR SEQ ID NO: 1551:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 192 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1551:

GGTATGTATT AATTAAAATG TGGTCATGAT TGAAACAGCA ATGTAAAAAT AGCACAACAT 60
 AATTnATAAA GGAGAGAAAC GGCATGCATG AACAAGATTT TAGAATTTTA GAGGGTCAAG 120
 ATATTACTTT GCCAGAATTA GGTAGAGAAT TAGAnAATAT TACAGGACAT ACGATTGCTG 180
 ATTCTACTGG CG 192

(2) INFORMATION FOR SEQ ID NO: 1552:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 76 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1552:

CTAAGTTAGA TGCTAGTATA CAAGATTTAC AACAAAAGGT ACTGGAATCG AATTGTGAAC 60
 TAGACAAACT AAATC 76

(2) INFORMATION FOR SEQ ID NO: 1553:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 135 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1553:

TGTGTTGGGG CCCCGTATAT TGAAAATTTG TTATAGGTGT ATTTCTTTGG TTAACATTTG 60
 TTATATAACT TGAGTTTTTA GGATGTTGAT TTTGCTTACC TTGTCTGCTA TGTAATGTCA 120
 CATCAACATG ATThA 135

(2) INFORMATION FOR SEQ ID NO: 1554:

- (A) LENGTH: 104 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1554:

10 TTTGAnATCA AATTCAC TTC GCAAACGTGT CCAAGCGTGA GCAAAGGGCT AGATGATTAA 60
TAGTTGCCCC ACTAACGGGA TCGCCCCAGT TATCCAAC TT ATCT 104

(2) INFORMATION FOR SEQ ID NO: 1555:

15

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 100 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1555:

25 AATAAGAAAC AnGACACTAG CTCACCACGA CGCGCACGGC CTGCGTGTA AAATGTTGGT 60
GGCGCGGGTT GGAGATCGTG TTCAACCAGA GCAGAAAATA 100

(2) INFORMATION FOR SEQ ID NO: 1556:

30

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 86 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1556:

40 CAATGAAATT ATTTATTATT TTAAGTGCAT TAAACCCCGA TGATGGCTGT CCGGTACCAG 60
GTGCATTTTG GTGCCCATGG TTTACC 86

(2) INFORMATION FOR SEQ ID NO: 1557:

45

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 78 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1557:

55 GTCATGTTCC CATCAAACT AATTTGTACT TACTAAAGGC TCAGCAGCGC AACAAATTAGG 60

(2) INFORMATION FOR SEQ ID NO: 1558:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 82 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1558:

AACTGGTTAC AGAAATACCA CGTTCCTGTT TCAACTTTCA TCCAGTCACT TGATCGCAAA 60
TTTACCAGTC TTCTTCCCTT TA 82

(2) INFORMATION FOR SEQ ID NO: 1559:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 78 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1559:

CCACAGCGGC ACTATAGCCA GCCCCTAATA TATACAGTAT TTGCATCTGA CTCATTGGTT 60
CATAAGTATA TGCACTGA 78

(2) INFORMATION FOR SEQ ID NO: 1560:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 76 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1560:

ACCATTGCT AACTTTTTAG CAGCGCAATG TTCTTATTAA CTGCTTACGC CATCTATAAA 60
AATAAACGTT CAACAA 76

(2) INFORMATION FOR SEQ ID NO: 1561:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 200 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

TTGGAACCCA AATTTTTTTTA ATTTTCCCAA AAATTGGGGG GGGACCCCCA ATTCCCTTAA 60
 GGGTTTTTCCT TGGGGGCCGG GGGTTAATTC CACCCGGGGT TAAAATTTTC CCAAAAATTA 120
 ATTTTnGAAA AGTTTTTAATT TAAGGAAACC CATnGTCCG GAATTTTTTAC CCCATCCTTA 180
 TGGGGGGTCC CAAAGATTCC 200

(2) INFORMATION FOR SEQ ID NO: 1562:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1562:

AACACAGAGA ATAACCAAGA GAAGACGTTT TCATCTGAAG AAAGTAACAG TAmGCCATTT 60
 ATGGAAGAAA ATCAAAACGA TGAGATAGTT ATAAAAGAAG ATTCATATAA TCCATTTCGTA 120
 ACGAAAACAT CTGAAAGTTT AATAGCTGAT GATGAATCTT CTGGTTATAA TAATACACGT 180
 GAAAAAGATG AAGACTACTT CAAAAACAA CAAGAAATTT TACAAGAAAT GGATCAAACA 240
 TTTGATTCAA ATGATGGTAC AACTGTGCAA AATTATGAGA ATAAAGCGTC TGATGATTAT 300
 TATGATGTAA ACGATATTAA AGGAACAAAA AGTAAAGACC CTAAACGAGG AATTCCATAT 360
 ATGGAATTGT TGGnCAGTCA TGGAACGTTA TTATTGCTCA 400

(2) INFORMATION FOR SEQ ID NO: 1563:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 454 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1563:

TCTTCATCAT CTTCTAATTT ACCAGCTGGA ATTTCTAGCA ATGGTTTTTC TACTGGTTTA 60
 CGATACTGTT TCACTAATAC GACTTCTTTT TTAGGTGTCA CTGCACAAAC ArCAACTGCA 120
 CCAATTATGAT AAATAAATTC TCTTGTTGAC GTTTCACCGT TTGGTAATGT CACTGTATGA 180
 ATTTCTACAT CTACAATTTT GCCATTATAA ATAAGTTC GATCAATTGT TTTTTCATTT 240
 AAATCCATTA TAATCACGTT CCTTTAAATT CATATTATAT ATTGATACAC TATGCTTGTT 300
 AGCTAAAGTG TATCGAAAGG AGAACAGACA TGCAAAAAAA TATATTAAAA AGTGGTATTT 360

AAATTATAGG ATTGTGCTGT TGAAAATGGG TATC

454

(2) INFORMATION FOR SEQ ID NO: 1564:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 69 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1564:

ACATCTCGCA TCGTCACGAC TTGCTTGAAC CACTAGCAGG TCAAACAAAG CTGTACAGGC 60

AACATCTGC 69

(2) INFORMATION FOR SEQ ID NO: 1565:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 117 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1565:

TCCAGAACCA TTTTAAATCC CGGGAAATAT AATTACCTCC ACTAAAGTAA TATATCCAAG 60

CCAAGACTAA TCCTCCTTAA GCCGGTTTAA GTAACCAGGT TGAGAAGGAT TTTTGG 117

(2) INFORMATION FOR SEQ ID NO: 1566:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 103 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1566:

TATTGAGATT AACAGTCTGG GAAAAATGAA CAGCAATTGT nTAATGTGAC GATGCTGATT 60

ACTTTTAAAC AGTATCATTT AATAACTCAG AGATGCGCTT TAT 103

(2) INFORMATION FOR SEQ ID NO: 1567:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 81 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1567:

5 AATGGATGGG ACAGCAATTA GTGCATAACG ACAATATATG CTCAATTTGT CGGCAACTGG 60
TTAAGAATCG TATTGTCACA A 81

(2) INFORMATION FOR SEQ ID NO: 1568:

10 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 80 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1568:

20 AATGGATTCA GTAGGTATTG GTGAAGCGCC AGACGCAGCT GATTTGAAAG ATGAAGGTTC 60
ACATACTTTT AGCATACCTT 80

(2) INFORMATION FOR SEQ ID NO: 1569:

25 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 95 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1569:

35 TTTTAAATA CGATTTTAAG GAGGCCATTA TAATGGCGAG TAAAAGTAGC GAATTAATGG 60
TTTTGGTTAG GAATTGGTCG TTTAGGCATT CAGGA 95

(2) INFORMATION FOR SEQ ID NO: 1570:

40 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 118 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1570:

50 CCCAATAAAA AAAGCCTGTT GTCACAATGG TCATAGACAC GTACATACTT TAAAGGTTTC 60
TGTAATATAA ATATTTTATA TGCCACTTTA AAGTTGGnAC GTTCGTATGT TGTACTAA 118

(2) INFORMATION FOR SEQ ID NO: 1571:

55 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 104 base pairs

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1571:

GACTTGATCA ATGAAGCATT GTGTGACAAT TGGTCTGTTT GCACACCGCA CGGATTGnGC 60

10 GTCATTTATT TGTACTAATT CAAAAACAT TGTGTGTTTTCT CTAG 104

(2) INFORMATION FOR SEQ ID NO: 1572:

(i) SEQUENCE CHARACTERISTICS:

15

(A) LENGTH: 118 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1572:

CCGAAGTGA ATGGTCCTAA TGTTTTACTC ATACCATATT GCGTAACCAT TGAGCGGCGA 60

25 TTGTGTTGCA CGTCGAGCAT TGAGACCGTT GTACTCGTAA nGTATATCTC TGTACACG 118

(2) INFORMATION FOR SEQ ID NO: 1573:

(i) SEQUENCE CHARACTERISTICS:

30

(A) LENGTH: 74 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1573:

AGGGATCAAA GGTCCATCCC CCATGCATTG GATAGTGGGG GATGACTTTT GATCCTATGT 60

TCCAGTTGCT TATT 74

40

(2) INFORMATION FOR SEQ ID NO: 1574:

(i) SEQUENCE CHARACTERISTICS:

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(A) LENGTH: 341 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1574:

AACCTTTTGA GTAAATTCAC CAATACTCAT CCCCTTATCA TTTAACAAAC TTTTATTAAT 60

GTTTTTGGTT ATATTATGAG TCTTTACTGC TTTTAGATTG TAAAAATTAT CGTCATAAAT 120

55

GTAATTAATG TAATAATAGA AAAGTGTATA TATCTCATAT CGCCACCTGC TATACAACCTT 240
 ATTAAATAAT TAATTCCAAG ACATATTAAT TATCTAATTA TAACCTTAGT TnACGTTATT 300
 5 ACATAATATA AAAATATATA ATAACCTTATC CnCCGGCnCC T 341

(2) INFORMATION FOR SEQ ID NO: 1575:

(i) SEQUENCE CHARACTERISTICS:

- 10 (A) LENGTH: 109 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1575:

ACGTGTACCA ACTTTTGGGC ACCATTGATA ATAnGTGTCA TAGGGTGACT CAGCATAACG 60
 20 GGCAAGCCTA TTAATGATAG CCAGATTAAG ACATACAGTA CATATGTTC 109

(2) INFORMATION FOR SEQ ID NO: 1576:

(i) SEQUENCE CHARACTERISTICS:

- 25 (A) LENGTH: 79 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1576:

GCTAGATTGC GGAATTAAC AATCATCAGC GATTTAATAT TTGCACTGGA GACGTCATGG 60
 35 TAATAAAAAA TTGATGAGA 79

(2) INFORMATION FOR SEQ ID NO: 1577:

(i) SEQUENCE CHARACTERISTICS:

- 40 (A) LENGTH: 69 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1577:

ATGATGGCTA TCATGAGATT GAGATGATAA TGACAACAGT TGATTTGAAA TGATCGTGTA 60
 ACTTTTCAT 69

50 (2) INFORMATION FOR SEQ ID NO: 1578:

(i) SEQUENCE CHARACTERISTICS:

- 55 (A) LENGTH: 104 base pairs

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1578:

AAATTGTCAC TnCAGGTCAT AACCAACCAG GTGGGACTGC ACGAGCGTTA CTAATGATCC 60

10 AACGGTCTTG CTTTGTGATG AGGCAACAAG TGCACCTTGAT CCGC 104

(2) INFORMATION FOR SEQ ID NO: 1579:

(i) SEQUENCE CHARACTERISTICS:

15

(A) LENGTH: 89 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1579:

GCTCAATAGA TACAATATT AGGACAACGG ACTATCGTTT ACAATTTATT CCAGATAAGG 60

25 ATCGCGCAGG TCGTATGCGT AACTATGCA 89

(2) INFORMATION FOR SEQ ID NO: 1580:

(i) SEQUENCE CHARACTERISTICS:

30

(A) LENGTH: 102 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1580:

TTGTCTCTAA TAATGGnTTT GGCTTTTTTCT AAAATTTTCAG ATGTGGGTGC TGGTGAAGCA 60

40 CCGACTGGTT AATTTTCTTG TCGTCACGGC CACTTTTTGT TT 102

(2) INFORMATION FOR SEQ ID NO: 1581:

(i) SEQUENCE CHARACTERISTICS:

45

(A) LENGTH: 102 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1581:

AAGGTGCTGT TATTAGGATA ATGnATTTAA ACCCCATGGT ATGAAGGATA TCTGGAAGTT 60

55 AGATTGGATA TCCCTTAACC ATGGGGGGTT TTATTTTTGG GG 102

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 160 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1582:

TTCAGGGGAG CTGAACATAT TGACGACTTT TGGGTCAATT CATTTTGCAT TTTACTTTTA 60
AATGCGTTGT TGCATGTAAT TGTATTAACG ACATACATGG TGGGGCTCTA AATnAATGCT 120
TGACTAATTT CTTGGATGGA GACCACGATT TACCAACTCA 160

(2) INFORMATION FOR SEQ ID NO: 1583:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 348 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1583:

TAAAAGCAAG TACATTAGAG GTTAGATCAC AAGCTACTCA AGACTTGAGT GAATATTATA 60
ATAGACCGTT CTTTGAGTAT ACAAATCAGT CAGGATATAA AGAGGAAGGA AAAGTGACGT 120
TTACTCCTAA TTATCAACTT ATAGATGTAA CTTTAACTGG GAATGAAAAG CAAAATTTTG 180
GTGAAGATAT TTCTAATGTA GATATATTTG TTGTAAGAGA AAATTCTGAT AGATCTGGTA 240
ATACAGCTTC AATTGGTGGT ATTACTAAAA CAAACGGTTC AAATTATATT GATAAAGTAA 300
AAGATGTAAA TTTAATAATT ACTAAAAACA TCGATAGTGT TACATCAA 348

(2) INFORMATION FOR SEQ ID NO: 1584:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 73 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1584:

AGCCAGCAGT AGATAGATAT ATTAATGAAT TCTTGAGAGAA AGGTAGCTCA AATTGTCCAA 60
TTGAGATATT GAA 73

(2) INFORMATION FOR SEQ ID NO: 1585:

- (A) LENGTH: 255 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1585:

10 GTAAGGAATG GTCACGTATT CCACACTTCT ATATGAATTA TTATGTATAT CAATACGCAA 60
 mTGGTTACAG TGCAGCTCAA AGCTTAAGTC ATCAAATTTT AnCAGAAGGT AAGCCAGCAG 120
 TAGATnGATA TATTAATGAA TTCTTGAAAA AAGGTAGCTC AAATTATCCA ATTGAGATAT 180
 15 TAAAAAATGC TGGTGTAGAT ATGACAACAC CTGAACCAAT TGAACAAGCT TGTGAAGTTT 240
 TTGAACAAAA ATTGA 255

(2) INFORMATION FOR SEQ ID NO: 1586:

20

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 25 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1586:

30 TTATTAGGTG AnTCCATTGG CAACATTGAT TGGTTTGTCA TTAGGACAAA TTTTATTATA 60
 CATTGGCGTT ATTTTTACTA TCTTATCTGG TATTGAATAC TTTTATAAAG GTAGAGATGT 120
 TTTTAAACAA AAATAAATAT TTGTTTATAC TAGATTTTCAT TTTCATATGG AATCTAGTTT 180
 35 TTTTAATCCC AATTTTAGAA ATTAGCCACG CAATTGTTTA TAATGATATA TTGTAAAACA 240
 ATATTTGTTC ATTTTTTTAG GGAAATCTG TAGTAGCATC TGATACATTG AATCTAAAAT 300
 TGATGTGAAT TTTTAAATGA AATACATGAA AAAATGAATT AAACGATACA AGGGGGATAT 360
 40 AAATGTCAAT TGCCATTATT GCTGTAGGCT CAGAACTATT 400

(2) INFORMATION FOR SEQ ID NO: 1587:

45

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 561 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 50 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1587:

55 CAAAGCGTCT ATTATTGTTT GATTTTGATG AAACATATTT TAAACATAAT ACAAATGAAG 60

AAGTGATCAC TGCTGTATTG ACAGGAAGTA CATTTCAAAG TGTCATGGAT AAaATGGATC 180
 AAGTTAATAT GACGTTTAAA CCATTACATA TCTTTTCTGA TTTGAGTTCT AAAATGTTCA 240
 5 CTTGGAATAA TGGCGAATAT GTTGAATCAG AAACATATAA AAAGAAAGTC TTGAGCGAAC 300
 CATTTTTATT TGAAGATATT GAAGATATAT TACGTCATAT TTCTGCGCAA TATAATGTCTG 360
 10 AATTTATTCC ACAAAGAGCA TTTGAAGGTA ATGAAACACA TTATAATTTT TATTTTCATT 420
 CAACAGGTAA TCACAACAAT GATAGTCGTA TCCTAGAAGC ACTnnTCAGA TACGCAAATG 480
 ACCAAAACTA TACAGCGAGA TTTAGTCGAA GCAATCCATT AGCTGGTGAT CCTGAAAAATG 540
 15 CGTATGATAT TGACTTCACA C 561

(2) INFORMATION FOR SEQ ID NO: 1588:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 79 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1588:

CCAACAGTTT TATCATTATG GCAAGTTCTG TTAACCTGC TGAGAGTTAT TTTGCACTGA 60
 30 TTGCAAAACC AGAAATTGG 79

(2) INFORMATION FOR SEQ ID NO: 1589:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 73 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1589:

GCAGATATGC AGCAATTTAT AGAGGACTAG TAAACGCATA TATGACTTAC AGCTTTCAGA 60
 45 CAAATAGCTT TGC 73

(2) INFORMATION FOR SEQ ID NO: 1590:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 71 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

TCATTTTATG GTTGATCATA GGCCTCGTCT TTTTCCTTGG GGATTTTATC TTAAATACA 60
CAGATTGGCG C 71

(2) INFORMATION FOR SEQ ID NO: 1591:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 78 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1591:

ATACAATACA ATTCACACCA TATATGGATA AAATGCAAGA TGCAATTACT GCAGTTGCAC 60
AGTGCAAGTA GCAATACC 78

(2) INFORMATION FOR SEQ ID NO: 1592:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 168 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1592:

CCAATTAATT AAAAACCGGA AAACCAATTT TTAAACCAA TTAAGTTAAA AATTTTTTAA 60
AATTGGGCCC CAAACCTTGG AAAAAGGTTT AATTTTCCTT TCCCAATTTT CCCAAAATTT 120
TTAAACCCAA AAATCCCAGG TTTTGGGTTA AATTTCCCTn GGTTAAAT 168

(2) INFORMATION FOR SEQ ID NO: 1593:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 117 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1593:

TGCTAGAAAAG TATAGAACCT GGTTCAAACG CATGGTTTTA TGTCCTTTT TAAACnGATG 60
TTTATTAAAA AAATATGGAA ATTGGCCACG TCCGCCAATT TCCTTAGAAA AGAACGT 117

(2) INFORMATION FOR SEQ ID NO: 1594:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 66 base pairs

- (C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1594:

AGACGAAGCC AAAAAGTTAT TCGCCAAATC TGAAATATTT TCAAAGACCT TAAAGGCGTA 60
AAATAC 66

(2) INFORMATION FOR SEQ ID NO: 1595:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 100 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1595:

ATTTTATTTA GGCCAATAAC TGnCTACTTC TGAAATAAGT TGCTTTGCAT AGTCTGACGC 60
GGGATGTTTG GATAATATCT TCTGTGTTAT TGCATTGCAA 100

(2) INFORMATION FOR SEQ ID NO: 1596:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 73 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1596:

GACCAGACGG CCGTAAACCT GGATGAAACC GTCCATTAGA TTCTGAAGTT GGTATTTTAC 60
CTAGAACGCA TGG 73

(2) INFORMATION FOR SEQ ID NO: 1597:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 66 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1597:

CTTTATAAAA TTGTCTTTGA CTAACAGGAT TTTCAACGCT ATTCACAAAC CATGGTTTAA 60
CATATT 66

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 139 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1598:

TATGGCACCC TCTTTGATnT TGTGACCGTT TTTGGTAATT CACCATTATT GTACGAACCA 60
 TGGAATTTCGC TGCCTTCCTT TAGGCAATAA CATAATTATA TTTATCCCCT TCTTGTCACT 120
 AGAGGTGCTG ACAACACCA 139

(2) INFORMATION FOR SEQ ID NO: 1599:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 101 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1599:

CTCCTCTGCA TGCACATCTT GTTGTAGCAA GGTTCACATG TAATTTATTA AATCGAAACT 60
 CTATCCAAC TATGTTATAAA GTTCATTCTA AACAAATnAG T 101

(2) INFORMATION FOR SEQ ID NO: 1600:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 172 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1600:

TTGTACCAAG GTTCACATGT AATTTATTAA AGCGAAACGC GTATCCAAC TATGTTATAAA 60
 GTTCATTTCGT AAACAAATAA GTATAAAAAT TCAATATTTT TATTACTAGA ATATGGTTAA 120
 ATACATTTAT TTCTTATAAn AATTTGATGT TTAAGATATT TTGCCAAATT GA 172

(2) INFORMATION FOR SEQ ID NO: 1601:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 112 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1601:

5 TTGGCACTGG CCGTCGTTTT ACAACGTCGT GCACTGGGAA AACCAAAAnCA CGACGTTGTA 60
 AAACGACGGC CAGTGCCAAG CTTGCATGCC TGCAGGTCGA CTCTAAGAAG GA 112

(2) INFORMATION FOR SEQ ID NO: 1602:

10 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 679 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1602:

20 TGCAATGGTT AATCATCTCA TATAACAACA CATAATTTGT ATCCTTAGGA GGAAAACAAC 60
 ATGACAAAAC ATTATTTAAA CAGTAAGTAT CAATCAGAAC AACGTTTCATC AGCTATGAAA 120
 AAGATTACAA TGGGTACAGC ATCTATCATT TTAGGTTCCC TTGnATACAT AGGCGCAGAC 180
 25 AGCCAACAAG TCAATGCGGC AACAGAAGCT ACGAACGCAA CTAATAATCA AAGCACACAA 240
 GTTTCTCAAG CAACATCACA ACCAATTAAT TTCCAAGTGC AAAAAGATGG gCTCTTCAGA 300
 GAAGTCACAC ATGGATGACT ATATGCAACA CCCTGGTAAA GTAaTTAAAC mAAATAATAA 360
 30 ATATTATTTT CAAACCGTGT TAAACAATGC ATCATTCTGG AAAGAATACA AATTTTACAA 420
 TGCAAACAAT CAAGAATTAG CAACAACGTG TGTTAACGAT AATAAAAAAG CGGATACTAG 480
 AACAAATCAAT GTTGCAATTG AACCTGGATA TAAGAGCTTA ACTACTAAAG TACATATTGT 540
 35 CGTGCCACAA ATTAATTACA ATCATAGATA TACTACGCAT TTGGAATTTG AAAAAGCAAT 600
 TCCTACATTA GCTGACGCAG CAAAACCAAA CAATGTTAAA CCGGTTCAAC CAAAACCAGC 660
 40 TCAACCTAAA ACACCTACT 679

(2) INFORMATION FOR SEQ ID NO: 1603:

45 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 85 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1603:

50 CATTTTAATT GATATAATTT AGACTTTAAC ATTTTCATGCT GTTCACGGTT TTAATTTGAG 60
 55 ACGTCATTTG GTATAACAAC TATAC 85

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 68 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1604:

ACTGGTGTGA ATAGCTCCAG CAATTTCTTT AACCGCGATC ATAATCAACG TCACCTTTTA 60
 ATTTGCCA 68

(2) INFORMATION FOR SEQ ID NO: 1605:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 109 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1605:

TGGGGGGTnT TTTTGGGTTG GGTAAAAA AGGGAATTGG CCCAAGGGGG GAATTCCTT 60
 AAAAAAACCC CCAACCCCT TGGGAAATTA AAAATTGGGT TAACCGGGA 109

(2) INFORMATION FOR SEQ ID NO: 1606:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 112 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1606:

GCTTATATAC ATGTTCCATT ATAAAAGGAG TACGAACGAA AGTAACGCAT GACGTTAATT 60
 TAAAAATATT GTAATAATTA TGGATTAAAT TTAAAACCA GGGGTATTCC AT 112

(2) INFORMATION FOR SEQ ID NO: 1607:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 106 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1607:

GTTCAAGTTG GTAACCTAAC AACACGnAAT TAGTTTAAAC GTTTGG

106

(2) INFORMATION FOR SEQ ID NO: 1608:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 83 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1608:

CACACTGATA CCATAGGATT TATGATAGAT CAACAGCATG ACCAAATGTA TGACCTAAAT

60

TTAAAAATTT ACGTACACCT TGT

83

(2) INFORMATION FOR SEQ ID NO: 1609:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 132 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1609:

AAAAGAATAA AGTCACTGAA CAATGGTCTT TCACAATGAT GTTGC GTCAA TGCACAAGCG

60

CATTATGtnt GTGACTTGGG CATTtTTGGCT TATCAGCTGA ATATTATACG CATTtTACATC

120

CCAATTAACG TA

132

(2) INFORMATION FOR SEQ ID NO: 1610:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 107 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1610:

TTTAATGCAT ACGCTTCTCG CTTAGCAATT TCTTTGCACG TCTAACAAGC ATTAACGCTC

60

TTAnTACTAT AATCACAACA AAACCAGCGA AATATAACAT GCGTATA

107

(2) INFORMATION FOR SEQ ID NO: 1611:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 84 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1611:

5 TTCGCACCTG GTATCGTTCA AACCACCAAT GATGGCCCGT CTCGCCGTGG CAACAGCCGA 60
AGACCGCAGG TAAACCCTGA ACGC 84

(2) INFORMATION FOR SEQ ID NO: 1612:

10 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 127 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1612:

20 ACTCACATGT ACGATAACAC CCTTCGTAAA TCCATCTTTG GTTTGCCAAG TTCGTCGTTG 60
TAAACTGTCT ATACTCGTTA AACCGCTACA TGTTTTCTTA AAnCCTGTGC CTAAATGCTT 120
TACTGAA 127

25 (2) INFORMATION FOR SEQ ID NO: 1613:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 129 base pairs
(B) TYPE: nucleic acid
30 (C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1613:

35 CGTTCAACTT TTTCAATTTT TAACGGCGTT TTACTATCTT TATCTGTAAC TAATTCAACT 60
CCAAACATTA AGCCTCGTCC TCTTACATCA CCAACATTTT GATGACGCTT CAGCGCATGT 120
40 AACTGTTTC 129

(2) INFORMATION FOR SEQ ID NO: 1614:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 348 base pairs
45 (B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1614:

nCAACTAGTG GATTTAAnAT AnACATAATT ATAAATGCAA ATGCTAATAG CTGAATACCC 60

55

GCACTAGGTG CATAATTTGT GTATTGAGCA AATAAAGCTA ATACAATGAT TGTAATTCCT 180
 TTAATGACAA ATAAAGGTAA ATTTAATCGT TTAAAGGTT GGTAATTAA AAATACAATT 240
 5 GCAGCTATAT GCGAGCCACT AACTGCCAGC AAATGATATA TACCTATCTC TTAAACACGT 300
 TCCTTAAATT GCTCATTAAAC TTCTTTTACG TCACCAGTAA TCAATGCC 348

(2) INFORMATION FOR SEQ ID NO: 1615:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 72 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1615:

20 GAGCTCCACC GCGGTGTCGC CCGCTCTAGA ACTACTGGAT CCCCCGGGCT GCAGGAATTC 60
 GGCACAGCAT AT 72

(2) INFORMATION FOR SEQ ID NO: 1616:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 63 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1616:

35 CATCACGTTA AATCATAACG CGTGACGTGC TTTTGCTATT TGTCTCTCGG TATCTCTATA 60
 TCT 63

(2) INFORMATION FOR SEQ ID NO: 1617:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 113 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1617:

50 ATTGAATTCA AGGGTGGAAC TCATGAATTG GCTGGAAAAA GGTAGATTTA ACTGGATGGT 60
 TGNAGCCATA TATCGGTGCG TTTATTTATT TGGTATTTTA AAAATCAACC TCG 113

(2) INFORMATION FOR SEQ ID NO: 1618:

- (A) LENGTH: 80 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1618:

10 GTACAATAAA GTGGTAAACA ACATGCCAAT GGAAAAAGGG ATTAAAGGTG TTTATGTCAT 60
 TCTTAAAGAT AGTAACGGTA 80

(2) INFORMATION FOR SEQ ID NO: 1619:

15

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 117 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1619:

25 ATCTTATGTT TTTTTCCTAA AACTTCTGCT ACTTCATTTA TTTGATGTAT GGTAGATAAT 60
 TCTGTTTGGA TACTCATATC AACTTTTTTCT ATCATATCTG AAATCTCTTT TnTGGCA 117

(2) INFORMATION FOR SEQ ID NO: 1620:

30

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 107 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1620:

40 CGATAAACCC TTCGTAATCA ATCTTTGGTT TGCCAAGTTC GTCGTTGTAA CAGTCTATAT 60
 CGTTAAAAGC TACATGnTTT CCTAAGCCTG TGCCTAATGC TTTACTG 107

(2) INFORMATION FOR SEQ ID NO: 1621:

45

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 63 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1621:

55 AATATCGTGT CTCTGTCCAG TGCTGTCCAA TCAATTTTGA TCCACCGATT GTCATACGTA 60

(2) INFORMATION FOR SEQ ID NO: 1622:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 75 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1622:

ACCATCTGAC ATCATCAATT ATGAATTAAT GATGATATTA AAAATAAATT TGAAACATTG 60
CCAATTGATA GTGCC 75

(2) INFORMATION FOR SEQ ID NO: 1623:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 78 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1623:

TACCTGTGTA TCAGCTCTAT TAACAACCTA ACATATGTGA ATAATTTGCG ATCCTTGTTG 60
ATAATGCTGT AATTTGAC 78

(2) INFORMATION FOR SEQ ID NO: 1624:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 95 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1624:

GCAAGCTTTT GCGGCTTCTG ATGCACCATT AACTTCTGTA ATTAAACACA CAAAGTGAAA 60
CAGGTAGGTA ATGCAAAACT GCAACGGACA ATCGA 95

(2) INFORMATION FOR SEQ ID NO: 1625:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 76 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

ATTGCGATTA CACAGTAGTG AATGAGATAT TTGACATGAA AGCTCCTGCA GCTTCTAAAG 60
 AAGAGTTAGC AGGTTT 76

(2) INFORMATION FOR SEQ ID NO: 1626:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 126 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1626:

AAAAGCTAAA AAAGATTATC AGGTGTATCA CAAACTCAAA TTCTCATTAC CATTTATCTC 60
 AGTGTGAACG TCTTAATTGA GAACTAATCT TAATTGAGAT ATTAGTCATA TAAGGATGGA 120
 CAAGCA 126

(2) INFORMATION FOR SEQ ID NO: 1627:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 116 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1627:

TGATACGATA GAACATAGTT CAGCACATTG TTTGTTGAAA TTGGATATTA CCGCCATTTT 60
 TTCACAATAT CAATAATACC TGAACGTGTT GGTThTTCCA CATTATGATT GTACAT 116

(2) INFORMATION FOR SEQ ID NO: 1628:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 91 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1628:

ATTTTGTCTT ATCTTGAACA AATCCGATTT TTCTCAGACA CTGAATCCAA AGTATTCATG 60
 TACCATAAAC CATCTGCATG TTGATTTATG C 91

(2) INFORMATION FOR SEQ ID NO: 1629:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1629:

	ACAGAAAGTC AAACAGTAAA AGCGGCAGAA TCAACTCAAG GTCAACACAA TTATAAATCG	60
10	TTAAAATACT ACTATAGCAA GCCAAGTATA GAGTTAAAAA ATCTTGATGG TTTGTATAGA	120
	CAGAAAGTGA CAGATAAAGG AGTATATGTT TGGAAGGATC GAAAAGATTA TTTTGTGGC	180
	TTGCTTGGTA AAGATATTGA AAAATACCCT CAAGGTGAGC ATGATAAGCA AGATGCATTT	240
15	TTAGTCATCG AGGAGGAAAC TGTTAATGGA AGACAATATT CAATTGGTGG TTTAAGTAAG	300
	ACAAATAGTA AAGAATTTAG TAAAGAAGTC GATGTTAAAG TAACAAGAAA AATTGATGAA	360
	TCATCGGAAA AGTCTAAAGA TAGTAAATTT AAAATTACTA	400

20

(2) INFORMATION FOR SEQ ID NO: 1630:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1630:

	GCTTTCCTTT TCGAAATCTA TAAATCTAAT CCATTGAAGT AAATAATTA TGATAATTAT	60
	TAATTCTATA ATTGTnGTTA TCTTTAAATA ATTTGGAAAC CTTTCATAAT CTAAACCAAA	120
35	AAAGAAAGTT AGACATGAAA AAAGTATCAT AAATAATGAT GCTAAACTTA AGGCTTGTGC	180
	ACCTGGCTTT CGAAGAAATGT CTATATTTTC CTTAGTAGTC ATATTTACCT ATCTCCTATA	240
	CATTGATTTT GTAATAGCAT ATTAAGTATT TAAAGTTATA AGTACTTAGA TTCTTTTCGA	300
40	TTAAAAGTAT AAAAGCCTAA AATTATCTTT ATATTATTAT TTGATGACAA CTTTATGGTC	360
	TCTATTGTTT TTTACTTAAA CGCTAAAAAG CTAnACAAAG	400

45

(2) INFORMATION FOR SEQ ID NO: 1631:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 70 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1631:

55

TCTAGAGCGA

70

(2) INFORMATION FOR SEQ ID NO: 1632:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 62 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1632:

CAACGAAGAT ATTCAAGTGT TCAGTCATTA TTTTGTACTG CTAATGAAAC TGATTCTTGT 60
GG 62

(2) INFORMATION FOR SEQ ID NO: 1633:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 81 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1633:

CTAATGATTA GATTCAAAC AATAAAGACT AAAAAACAA GTTGATAATG GTAAAGATAT 60
TATCCAACCTT GACATCTAAA G 81

(2) INFORMATION FOR SEQ ID NO: 1634:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 63 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1634:

AATTTACCT TTGTCTAGTA ATTTATTTGT GTAGTGTAAT CATTAATTGT TTTAATATCT 60
AGT 63

(2) INFORMATION FOR SEQ ID NO: 1635:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 579 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1635:

ACCAACTAGC TAAATGCCAG CGCGGnATCC ATCTCAnAAG TGCACAGCAA GACCGTCTTT 60
 5 CCAACTTTTG AACCATGCGG TTCAAAATAT TATCCGGTAT TnAGCTACGG TTTCCCGAAG 120
 TTATCCCACT CTTATAGGTA GGTtATCCCC AGTGTtACTC ACCCGTCCGC CGCTAACATC 180
 CAGAGAAGCA AGCTTCTCGT CCGTTCGCTC GACTTGcATG TATTaGGCAc GCCGCCAGCG 240
 10 TTCATCCTGA GCCAGGATCA AACTCTCCAT AAAAATTATG ATGTTTGATT AGCTCATAAA 300
 TACTAAATAA TGTTTGTAAC TAATAGTTAC GTTTTTGGAA TTAACGTTGA CATATTGTCA 360
 15 TTCAGTTTTc AATGTTcATT AATGTTCAAT CTCTTTTATT CTACTTCATT TATTTCTTGA 420
 AGTCAATAAC TTTTTGAACG ATTACTTTAT TTATTCTATA TTGTTTTTAT AGTTATTTCA 480
 ATGGtAAGTn TTACACTTTT GaaATTCTTC TTTAAAAACA ACTGCGTCGt TTTTGaCGcT 540
 20 TTATCaTATT ATCmACTTTG GGaATTTAAA GTCAATAAC 579

(2) INFORMATION FOR SEQ ID NO: 1636:

(i) SEQUENCE CHARACTERISTICS:

- 25 (A) LENGTH: 69 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1636:

TCGACATTAA GCAACGTTCT TCGCAAAAGG TAGCGAGCGA CACGAGTTAA CTTTGCACGT 60
 35 TTCATTATT 69

(2) INFORMATION FOR SEQ ID NO: 1637:

(i) SEQUENCE CHARACTERISTICS:

- 40 (A) LENGTH: 116 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1637:

CTGTGACTTC GTCGCGATGA CCTTCGCCGT TGTTCTCATG GTAAGCTTTA AGTATCGTCG 60
 50 ATGCAGTCnG TTCGCCATGT GCGCCAGCAG ACTGGTTGTA ATGTCGCCTC GTCCGT 116

(2) INFORMATION FOR SEQ ID NO: 1638:

(i) SEQUENCE CHARACTERISTICS:

- 55 (A) LENGTH: 71 base pairs

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1638:

ACAACATTTA GGTACTTTCA CGCATATCAC TACAGCTCAA CGTGATGATT TACCAAATCA 60

10 AATTCACAA G 71

(2) INFORMATION FOR SEQ ID NO: 1639:

(i) SEQUENCE CHARACTERISTICS:

15

(A) LENGTH: 73 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1639:

GCGTGGCTTT GTGATTAACA TTGACAAGCA CGTGCAACAA CATATTGAC GCGATAAAGC 60

25 GACATCTAAT ATT 73

(2) INFORMATION FOR SEQ ID NO: 1640:

(i) SEQUENCE CHARACTERISTICS:

30

(A) LENGTH: 400 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1640:

CGCGATCATT TTCATTTCTA ATTAATCTTC CAAGTCCTTG TCTAAAACGT GTAACGTCAT 60

40 CAGGTAATAC ATATTCCTTG AAAGTTGAAG TGAATTCAGA ATCCATAAGC CAATATTTTG 120

CATTATGCTT GTTCATAAAC GGTAACCTCG CTATCATCAC ACATTTAATA CCATTGCTT 180

GAAAATCAAA ACCTTCAAAA AATGTTGACG TACCAAGCAG TATGGCCTTA TCAAAATTAT 240

45 TAAACTGTTG TACTATTTTA TAATTTTGGT TCTGCTGTTG TGTTAATACA ACATAATCTT 300

CAAATTCTGG CAATTCATTT AAGCATATCT TGTACCATAT GCATCATTTT ATAACGTA 360

AATAAGACTA AACATTTTGA TGACGTTATA GTCGTATATn 400

50

(2) INFORMATION FOR SEQ ID NO: 1641:

(i) SEQUENCE CHARACTERISTICS:

55

(A) LENGTH: 66 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1641:

ATTGTTGTAC CATGTATACT AACAAATTGTA ATGTCTCATT TCAGTAAACA AAAAGCGAAA 60
GACATT 66

(2) INFORMATION FOR SEQ ID NO: 1642:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1642:

ATTTTCGTCGG GAATAAATTT TGCCATTACA TAGAAATATC TAATAGATAA CGAAAAAGTA 60
TCGTATGTAT TTTTAATATA GTGTAAAATA TTATATGTAA AATAAAATGT AGGTTTTTTAG 120
TTAGAGGCAT TATAAGAnAA TTTTGAGTAT AGGTTAGCTT TTAATTATGA ATCTTATTGA 180
AATTTGATTA ATAAAAATAT GATAGGGGAT TAAAATGAAA CTATTTTATA TCGTATTTCT 240
TATTATTATA TGGCTGAATA TATTTTTAGG AAATGAAATC ATCCATACAC TGA CTGTTTT 300
AATAACAACA TTGTATATTG TTAATTCACG AnAGGGGATT AAAAAATGACA GAGTTGAATA 360
ATATTATAAA CGCGCnTGCA ATCnTTGTTT GAGTCCGGAA 400

(2) INFORMATION FOR SEQ ID NO: 1643:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 66 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1643:

AACTAGAGGA GGACATCCTA ATGGAAGCAA AACCCGTTGC TAGAACAATA AGAATCGCAC 60
CTCGTA 66

(2) INFORMATION FOR SEQ ID NO: 1644:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 75 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1644:

TATCAATTTT ATATGCGATT TGGCCTTGCA ATAATTAGGT CTCACCTTGC CATATCTTTA 60
5 CCTAAGCAAT ACTTG 75

(2) INFORMATION FOR SEQ ID NO: 1645:

(i) SEQUENCE CHARACTERISTICS:

- 10 (A) LENGTH: 70 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1645:

CATTCTCCTG CATCATAAAA ATCAACAATT GTATCATCAA AGTGATCAA AATATTTTAA 60
20 TATCCCAATT 70

(2) INFORMATION FOR SEQ ID NO: 1646:

(i) SEQUENCE CHARACTERISTICS:

- 25 (A) LENGTH: 73 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1646:

AGTGACACTT TCGTTCCACC ACATCGTAAA GAAGTACTTC AAGCACGTGA AGATGACATC 60
35 AAAGAAAAAG TTG 73

(2) INFORMATION FOR SEQ ID NO: 1647:

(i) SEQUENCE CHARACTERISTICS:

- 40 (A) LENGTH: 71 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1647:

CTGTGATTGG TGTTGTGATT GTCTTGCTTC CTGTTGTCC TTCTTGTTTC GCTCGCTCTT 60
50 CGCCGGGTTG T 71

(2) INFORMATION FOR SEQ ID NO: 1648:

(i) SEQUENCE CHARACTERISTICS:

- 55 (A) LENGTH: 115 base pairs

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1648:

AACTATAGAA AAATTCGGAA TTATACCAGA AATGGAATAT GAAATGGAAG AGGTTAAACA 60

10

AAACGAGCAA TATATTAGAG AGCAAGAAGA AGCTGGAACA ATAGAGGCGA TAACA 115

(2) INFORMATION FOR SEQ ID NO: 1649:

(i) SEQUENCE CHARACTERISTICS:

15

(A) LENGTH: 59 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1649:

TGTTGTCATG ATCTGAAAAG TCAAAGTCAA TAGAACATTG GCTTTGGCTT TTTATTTGG 59

25

(2) INFORMATION FOR SEQ ID NO: 1650:

(i) SEQUENCE CHARACTERISTICS:

30

(A) LENGTH: 125 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1650:

35

ACCGATAATA GTACACGGCA TAATGnAACA ACTTGGCATG CACCCTTTTT ACGTTCCTTT 60

ATCTCTGCAT GATTGTCATG TTCATCATGG TTTGGCTTGC ATTAATAGAG AGGGTTGACG 120

40

CAGAA 125

(2) INFORMATION FOR SEQ ID NO: 1651:

(i) SEQUENCE CHARACTERISTICS:

45

(A) LENGTH: 71 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1651:

TGATTAACGC GAATGCCACT TTTACTACCA ATGTTCCCAA AGCTGCTTCT GACAAACGCC 60

ATTGTACTCT G 71

55

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 60 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

5

- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1652:

10

TCACTACATG CACCATAAAT ACAGTATGAA CGTATTGAAA TGGGCATTAC ATGATACAGA

60

- (2) INFORMATION FOR SEQ ID NO: 1653:

15

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 123 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20

- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1653:

25

TTAATTGAAA CAATTGACAA ATGCAATTTG ACGCCAAACT TTGAACTTTG AATGGATTAT
 CACATTATGA TTGTTTCATCC ATGGnCAATT AGCATGGACG TATTACATTC TGGATTATCA
 AGC

60

120

- (2) INFORMATION FOR SEQ ID NO: 1654:

123

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 76 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35

- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1654:

40

CTATGACGTC GCATGCACGC GTAACCTTGGG CCCCTCGAGG GATCCTCTAG AGCGGCCGCC
 CTTTTTTTTT TTTTTT

60

- (2) INFORMATION FOR SEQ ID NO: 1655:

76

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 145 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

50

- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1655:

55

TTTTAAATTT TCGTGAAATC GGAAATGTAC GATTAGTTAT TAAGCGTTAG AATGTGTGAT
ATGTGAACCT GGTATTGACG GCGCT

120

145

(2) INFORMATION FOR SEQ ID NO: 1656:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 73 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1656:

TTTAGAATTC CAATACGCTA TTGCCAGCGA TTTAGCCACT TGTGGGTAAT GATATTGAAG
GTGTTAGTCA AGT

60

73

(2) INFORMATION FOR SEQ ID NO: 1657:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 93 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1657:

CTTCTGAAAA GTAGTAATGT AACCTATTGG ATGCGAATGA ATCCCCAAAT TTAGTGACG
TATGTGGCTT CATCTTCAGA ACCTGTATCT GGT

60

93

(2) INFORMATION FOR SEQ ID NO: 1658:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 58 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1658:

AAGTTACAT GCAAGTTGAC GATGTAATGA CTCAAAAAGA GTGGAAACAA AAACACGA

58

(2) INFORMATION FOR SEQ ID NO: 1659:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 65 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear